

Model C302

Slush Freezer

Original Operating Instructions

059661-M



Complete this page for quick reference when service is required:

Taylor Distributor:_			
Address:		_	
Information found	d on the data label:		
Model Number:			
Serial Number:			
Electrical Specs:	Voltage	Cycle	
	Phase		
Maximum Fuse Siz	:e:		A
Minimum Wire Am	pacity:		A
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Note: Continuing research results in steady improvements; therefore, information in this manual is subject to change without notice.

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Taylor Company 750 N. Blackhawk Blvd. Rockton, IL 61072

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Section 1

To the Installer

The following are general installation instructions. For complete installation details, please see the checkout card.

Installer Safety

In all areas of the world, equipment should be installed in accordance with existing local codes. Please contact your local authorities if you have any questions.

Care should be taken to ensure that all basic safety practices are followed during the installation and servicing activities related to the installation and service of Taylor equipment.

- Only authorized Taylor service personnel should perform installation and repairs on the equipment.
- Authorized service personnel should consult OSHA Standard 29CFRI910.147 or the applicable code of the local area for the industry standards on lockout/tagout procedures before beginning any installation or repairs.
- Authorized service personnel must ensure that proper PPE is available and worn when required during installation and service.
- Authorized service personnel must remove all metal jewelry, rings, and watches before working on electrical equipment.

The main power supply(s) to the freezer must be disconnected prior to performing any repairs. Failure to follow this instruction may result in personal injury or death from electrical shock or hazardous moving parts as well as poor performance or damage to the equipment.

Note: All repairs must be performed by an authorized Taylor Service Technician.

This unit has many sharp edges that can cause severe injuries.

Site Preparation

Review the area where the unit will be installed before uncrating the unit. Make sure all possible hazards to the user or equipment have been addressed.

For Indoor Use Only: This unit is designed to operate indoors, under normal ambient temperatures of 70° - 75°F (21° - 24°C). The freezer has successfully performed in high ambient temperatures of 104°(40°C) at reduced capacities.

This unit must **NOT** be installed in an area where a water jet or hose can be used. **NEVER** use a water jet or hose to rinse or clean the unit. Failure to follow this instruction may result in electrocution.

This unit must be installed on a level surface to avoid the hazard of tipping. Extreme care should be taken when moving this equipment for any reason. Two or more persons are required to safely move this unit. Failure to comply may result in personal injury or equipment damage.

Uncrate the unit and inspect it for damage. Report any damage to your Taylor Distributor.

This piece of equipment is made in the USA and has USA sizes of hardware. All metric conversions are approximate and vary in size.

Air Cooled Units

Air cooled units require a minimum of 3" (76 mm) of air space on both sides, 3" (76 mm) at the rear, and 12" (305 mm) on the top of the unit. Minimum air clearances must be met to assure adequate air flow for optimum performance.

Water Cooled Refrigeration Units (Water Cooled Units Only)

On the back of the unit, two additional 3/8" (9.5 mm) F.P.T. water connections for condenser inlet and outlet have been provided for easy hook-up. 3/8" (9.5 mm) inside diameter water lines should be connected to the machine. Flexible lines are recommended, if local codes permit. Failure to use adequate size water lines may cause the unit to go on high head pressure and shut down.

Depending on local water conditions, it may be advisable to install a water strainer to prevent foreign substances from clogging the automatic water valve.

DO NOT INSTALL A HAND SHUT-OFF VALVE ON THE "OUT" LINE! Water cooled units are counter flow and the water should flow in this order: First, through the automatic water valve, second, through the inlet located at the bottom of the condenser, and third, through the outlet fitting located at the top of the condenser to an open trap drain.

IMPORTANT: Water pressures are pre-set at the factory. **Do not adjust the water pressure.** Improper water adjustments may cause operation discrepancies.

Water Connections

An adequate cold water supply must be provided with a hand shut-off valve. On the back of the unit, a 3/8" (9.5 mm) M.F.L. water connection has been provided for easy hook-up. A flexible line is recommended, if local codes permit. A minimum of 25 psi water pressure is required to avoid having the unit cut out the low water pressure switch. A booster pump must be provided if this pressure is not available.

Note: Water lines beyond 200 ft. (61 m) require 1/2" (13 mm) water lines.



INSTALL POTABLE WATER CONNECTION WITH ADEQUATE BACK-FLOW PROTECTION TO COMPLY WITH APPLICABLE NATIONAL, STATE AND LOCAL CODES.

It is always a good practice to have a filter system to improve the quality of the water and to avoid clogging the operating components.

IMPORTANT: The water filter (064422-SER) must be thoroughly flushed with water before connecting it to the machine. This removes any loose particles present from the manufacture of the filter that could clog the flow control. To flush the filter, connect the inlet end of the filter to the water supply. Position the outlet end of the filter over an empty pail. Open the water supply. Allow water to flow through the filter until the water exiting the filter is clear. Close the water supply. Attach the outlet end of the filter to the machine. Reopen the water supply.

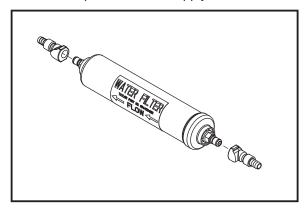


Figure 1

Electrical Connections

Each freezer requires one power supply. Check the data label on the freezer for branch circuit overcurrent protection or fuse, circuit ampacity and electrical specifications. Refer to the wiring diagram provided inside of the control box, for proper power connections.

In the United States, this equipment is intended to be installed in accordance with the National Electrical Code (NEC), ANSI/NFPA 70-1987. In all other areas of the world, equipment should be installed in accordance with the existing local codes. Please contact your local authorities.

The purpose of the NEC code is the practical safeguarding of persons and property from hazards arising from the use of electricity. This code contains provisions considered necessary for safety. Compliance therewith and proper maintenance will result in an installation essentially free from hazard!

The NEC is a United States regulatory agency. International users must follow local electrical codes.



CAUTION: THIS EQUIPMENT MUST BE PROPERLY GROUNDED! FAILURE TO DO SO CAN RESULT IN SEVERE PERSONAL INJURY FROM ELECTRICAL SHOCK!

This unit is provided with an equipotential grounding lug that is to be properly attached to the rear of the frame by the authorized installer. The installation location is marked by the equipotential bonding symbol (5021 of IEC 60417-1) on both the removable panel and the equipment's frame.



- Stationary appliances which are not equipped with a power cord and a plug or another device to disconnect the appliance from the power source must have an all-pole disconnecting device with a contact gap of at least 3 mm installed in the external installation.
- Appliances that are permanently connected to fixed wiring and for which leakage currents may exceed 10 mA, particularly when disconnected or not used for long periods, or during initial installation, shall have protective devices such as a GFI, to protect against the leakage of current, installed by the authorized personnel to the local codes.
- Supply cords used with this unit shall be oil-resistant, sheathed flexible cable not lighter than ordinary polychloroprene or other equivalent synthetic elastomer-sheathed cord (Code designation 60245 IEC 57) installed with the proper cord anchorage to relieve conductors from strain, including twisting, at the terminals and protect the insulation of the conductors from abrasion.

Beater Rotation

Beater rotation must be **clockwise** as viewed looking into the freezing cylinder.

Note: The following repairs must be performed by an authorized Taylor Service Technician.

To correct rotation on a single-phase unit, change the leads on the capacitor in the watt-control electrical box. (See wiring diagram for details.)

To correct the rotation on a three-phase unit, interchange any two incoming power supply lines at the freezer main terminal block only.

Initial Freezing Cylinder Cleaning

Due to the types of products used in FCB equipment, it is imperative that the freezing cylinder and the inlet tube be thoroughly brush cleaned, rinsed, and sanitized before running any product.

Prepare a cleaning solution, using 2 oz. of liquid detergent in 2 gallons of warm water. Using this solution, brush clean the freezing cylinder and the inlet tube. Rinse the freezing cylinder and the inlet tube with clean water. Sanitize, using the sanitizing procedures outlined in this Operator Manual, starting on page 24.

Refrigerant

In consideration of our environment, Taylor proudly uses only earth friendly HFC refrigerants. The HFC refrigerant used in this unit is R404A. This refrigerant is generally considered non-toxic and non-flammable, with an Ozone Depleting Potential (ODP) of zero (0). However, any gas under pressure is potentially hazardous and must be handled with caution.

NEVER fill any refrigerant cylinder completely with liquid. Filling the cylinder to approximately 80% will allow for normal expansion.

Refrigerant liquid sprayed onto the skin may cause serious damage to tissue. Keep eyes and skin protected. If refrigerant burns should occur, flush immediately with cold water. If burns are severe, apply ice packs and contact a physician immediately.

Taylor reminds technicians to be cautious of government laws regarding refrigerant recovery, recycling, and reclaiming systems. If you have any questions regarding these laws, please contact the factory Service Department.

WARNING: R404A refrigerant used in conjunction with polyolester oils is extremely moisture absorbent. When opening a refrigeration system, the maximum time the system is open must not exceed 15 minutes. Cap all open tubing to prevent humid air or water from being absorbed by the oil.

Section 2

To the Operator

The freezer you have purchased has been carefully engineered and manufactured to give you dependable operation.

The Model C302, when properly operated and cared for, will produce a consistent quality product. Like all mechanical products, this machine will require cleaning and scheduled maintenance. A minimum amount of care and attention is necessary if the operating procedures outlined in this manual are followed closely.

This Operator's Manual should be read before operating or performing any maintenance on your equipment.

Your freezer will NOT eventually compensate and correct for any errors during the set-up or filling operations. Thus, the initial assembly and priming procedures are of extreme importance. It is strongly recommended that all personnel responsible for the equipment's operation study these procedures together in order to be properly trained and to make sure that no misunderstandings exist.

In the event you should require technical assistance, please contact your local authorized Taylor Distributor for service.

Note: Warranty is valid only if the parts are authorized Taylor parts, purchased from an authorized Taylor Distributor, and the required service work is provided by an authorized Taylor service technician. Taylor reserves the right to deny warranty claims on equipment or parts if non-approved parts or refrigerant were installed in the machine, system modifications were performed beyond factory recommendations, or it is determined that the failure was caused by neglect or abuse.

Note: Constant research results in steady improvements; therefore, information in this manual is subject to change without notice.

If the crossed out wheeled bin symbol is affixed to this product, it signifies that this product is compliant with the EU Directive as well as other similar legislation in effect after August 13, 2005. Therefore, it must be collected separately after its use is completed, and cannot be disposed as

unsorted municipal waste. The user is responsible for returning the product to the appropriate collection facility, as specified by your local code.

For additional information regarding applicable local laws, please contact the municipal facility and/or local distributor.

Compressor Warranty Disclaimer

The refrigeration compressors on this machine are warranted for the term indicated on the warranty card accompanying this machine. However, due to the Montreal Protocol and the U.S. Clean Air Act Amendments of 1990, many new refrigerants are being tested and developed, thus finding their way into the service industry.

Some of these new refrigerants are being advertised as "drop-in" replacements for numerous applications. It should be noted that, in the event of ordinary service to this machine's refrigeration system, only the refrigerant specified on the affixed data label should be used. The unauthorized use of alternate refrigerants will void your compressor warranty. It will be the owner's responsibility to make this fact known to any technician he employs.

It should also be noted that Taylor does not warrant the refrigerant used in its equipment. For example, if the refrigerant is lost during the course of ordinary service to this machine, Taylor has no obligation to either supply or provide its replacement either at billable or unbillable terms. Taylor does have the obligation to recommend a suitable replacement if the original refrigerant is banned, obsoleted, or no longer available during the five year warranty of the compressor.

Taylor will continue to monitor the industry and test new alternates as they are being developed. Should a new alternate prove, through our testing, that it would be accepted as a drop-in replacement, then the above disclaimer would become null and void.

To find out the current status of an alternate refrigerant as it relates to your compressor warranty, call the local Taylor Distributor or the Taylor factory. Be prepared to provide the Model/Serial Number of the unit in question.

Section 3 Safety

We, at Taylor Company, are concerned about the safety of the operator when he or she comes in contact with the freezer and its parts. Taylor has gone to extreme efforts to design and manufacture built-in safety features to protect both you and the service technician. As an example, warning labels have been attached to the freezer to further point out safety precautions to the operator.

IMPORTANT - Failure to adhere to the following safety precautions may result in severe personal injury or death. Failure to comply with these warnings may damage the machine and its components. Component damage will result in part replacement expense and service repair expense.

DO NOT operate the freezer without reading this Operator Manual. Failure to follow this instruction may result in equipment damage, poor freezer performance, health hazards, or personal injury.

Per IEC 60335-1 and its part 2 standards, "This appliance is to be used only by trained personnel. It is not intended for use by children or people with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless given supervision or instruction concerning the use of the appliance by a person responsible for their safety."

This unit is provided with an equipotential grounding lug that is to be properly attached to the rear of the frame by the authorized installer. The installation location is marked by the equipotential bonding symbol (5021 of IEC 60417-1) on both the removable panel and the equipment's frame.

DO NOT use a water jet to clean or rinse the freezer. Failure to follow these instructions may result in serious electrical shock.



- **DO NOT** operate the freezer unless it is properly grounded.
- DO NOT operate the freezer with larger fuses than specified on the freezer data label.
- All repairs must be performed by an authorized Taylor service technician. The main power supplies to the machine must be disconnected prior to performing any repairs.
- Cord Connected Units: Only Taylor authorized service technicians may install a plug on this unit.
- Stationary appliances which are not equipped with a power cord and a plug or another device to disconnect the appliance from the power source must have an all-pole disconnecting device with a contact gap of at least 3 mm installed in the external installation.
- Appliances that are permanently connected to fixed wiring and for which leakage currents may exceed 10 mA, particularly when disconnected or not used for long periods, or during initial installation, shall have protective devices such as a GFI, to protect against the leakage of current, installed by the authorized personnel to the local codes.
- Supply cords used with this unit shall be oil-resistant, sheathed flexible cable not lighter than ordinary polychloroprene or other equivalent synthetic elastomer-sheathed cord (Code designation 60245 IEC 57) installed with the proper cord anchorage to relieve conductors from strain, including twisting, at the terminals and protect the insulation of the conductors from abrasion.

Failure to follow these instructions may result in electrocution. Contact your local authorized Taylor Distributor for service.

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- DO NOT allow untrained personnel to operate this machine.
- DO NOT operate the freezer unless all service panels and access doors are restrained with screws.
- DO NOT remove any internal operating parts (example: freezer door, beater, scraper blades, etc.) unless all control switches are in the OFF position.

Failure to follow these instructions may result in severe personal injury from hazardous moving parts.

This unit has many sharp edges that can cause severe injuries.

- DO NOT put objects or fingers in the door spout. This may contaminate the product and cause severe personal injury from blade contact.
- USE EXTREME CAUTION when removing the beater asssembly. The scraper blades are very sharp.

CAUTION: This unit is pressurized when in operation. The control switch must be in the OFF position until the unit is completely assembled. No part should ever be removed from the machine while it is in operation. No parts should be removed until the control switch has been turned to the OFF position and all pressure has been relieved by opening the draw valve. Failure to follow this instruction may result in severe personal injury from hazardous moving parts or from the impact of propelled parts.

This unit must be installed on a level surface to avoid the hazard of tipping. Extreme care should be taken in moving this equipment for any reason. Two or more persons are required to safely move this unit. Failure to comply may result in personnel injury or equipment damage.

Cleaning and sanitizing schedules are governed by your state or local regulatory agencies and must be followed accordingly. Please refer to the cleaning section of this manual for the proper procedure to clean this unit.

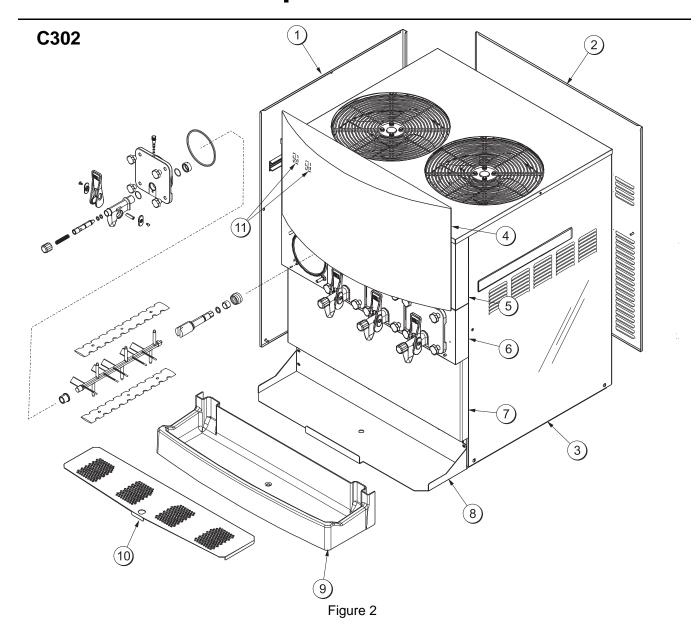
DO NOT obstruct air intake and discharge openings: Air cooled units require a minimum of 3" (76 mm) of air space on both sides, 3" (76 mm) at the rear, and 12" (305 mm) on the top of the unit. Minimum air clearances must be met to assure adequate air flow for optimum performance.

For Indoor Use Only: This unit is designed to operate indoors, under normal ambient temperatures of 70° - 75°F (21° - 24°C). The freezer has successfully performed in high ambient temperatures of 104°(40°C) at reduced capacities.

NOISE LEVEL: Airborne noise emission does not exceed 78 dB(A) when measured at a distance of 1.0 meter from the surface of the machine and at a height of 1.6 meters from the floor.

Section 4

Operator Parts Identification



ITEM **DESCRIPTION** PART NO. PANEL-SIDE*LEFT 059721 PANEL-REAR 059657 PANEL-SIDE*RIGHT 059722 DISPLAY-LIGHTED 059584-27 4 PANEL-FRONT-UPPER 059577 PANEL-FRONT-SHELL 059576

ITEM	DESCRIPTION	PART NO.
7	PANEL-FRONT-LOWER	059652
8	SHELF-DRIP TRAY	059653
9	TRAY-DRIP	059654
10	SHIELD-SPLASH	059659
11	SWITCH-ROCKER SPST	059627

Beater Door Assembly

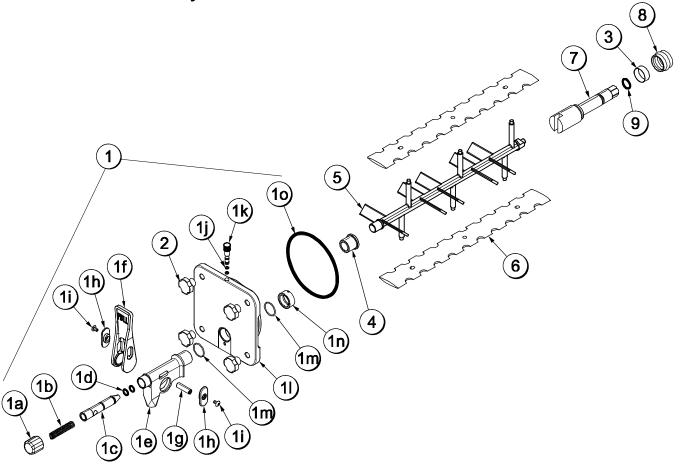


Figure 3

ITEM	DESCRIPTION	PART NO.
1	DOOR ASLUSH PRESS.	X39572-BLA
1a	CAP-SPOUT-DOOR-FCB-BLK	046191-BLA
1b	SPRING-COMP.480X.072X3.0	039320
1c	VALVE-DRAW-DOOR-PRESS.	039324
1d	O-RING-9/16 OD X .103W	016369
1e	SPOUT-DOOR-FCB-BLACK	046190-BLA
1f	HANDLE-DRAW-FCB-BLACK	046192-BLA
1g	PIN-PIVOT-SPOUT-DOOR	039321
1h	SLIDE-HANDLE-DOOR-BLK	046193-BLA
1i	SCREW-10-32X3/8PHL	053869
1j	O-RING-9/32 OD X 1/16 WALL	029751
1k	PLUG-PRIME-SLUSH-PRESS.	039568
11	DOOR-FREEZER-SLUSH-PRES	039573

ITEM	DESCRIPTION	PART NO.
1m	O-RING-1.129 ODX.989ID	039219
1n	NUT-SPOUT-DOOR-PRESS.	039323
10	O-RING-5-1/4ODX.210W (DOOR)	017003
2	NUT-STUD	043666
3	BUSHING-BEATER SHAFT/BOOT SEAL	042278
4	BEARING-FRONT-PRESSURE	039349
5	BEATER-PLASTIC-FCB-PRESS.	041182
6	BLADE-SCRAPER-FCB-16INCH	041103
7	SHAFT-BEATER-SLUSH-PRES	039337
8	SEAL-DRIVE SHAFT	032560
9	O-RING-7/8 OD X .139W (BEATER SHAFT)	025307

Accessories

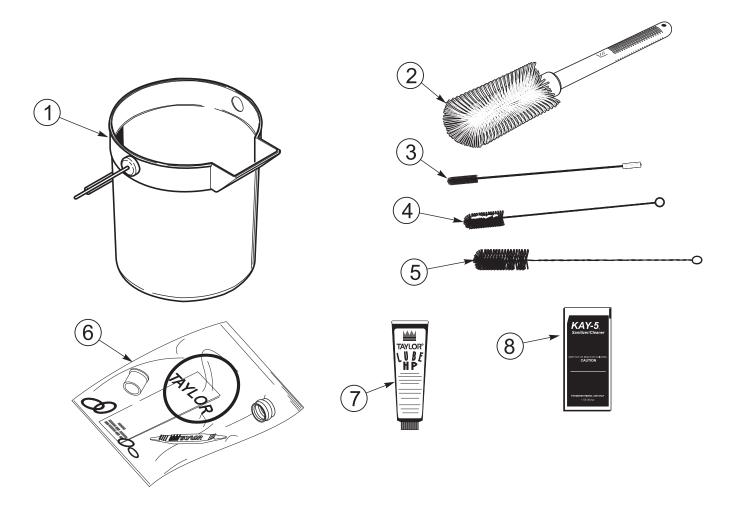


Figure 4

ITEM	DESCRIPTION	PART NO.
1	PAIL-MIX 10 QT	013163
2	BRUSH-MIX PUMP BODY-3"X7"	023316
3	BRUSH-DOUBLE ENDED	013072
4	BRUSH-REAR BRG 1"DX2"L	013071

ITEM	DESCRIPTION	PART NO.
5	BRUSH-DRAW VALVE 1-1/2"OD	014753
6	KIT ATUNE UP	X59121
7	LUBRICANT-TAYLOR HI PERF	048232
8	SANITIZER KAY-5 125 PACKETS	041082

Section 5

Important: To the Operator

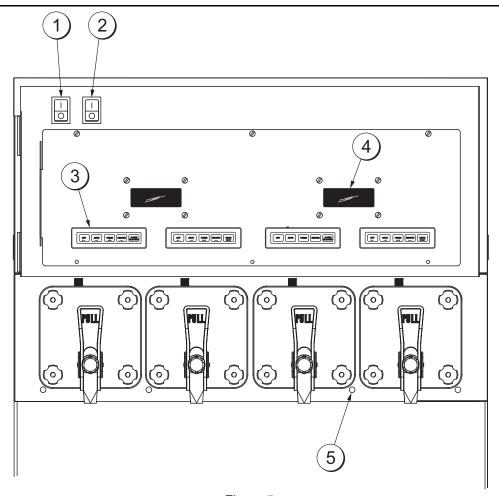


Figure 5

ITEM	DESCRIPTION
1	CONTROL SWITCH-LEFT SIDE
2	CONTROL SWITCH-RIGHT SIDE
3	KEYPAD
4	LIQUID CRYSTAL DISPLAY
5	PRODUCT LIGHT

Control Switches

There are two control switches located at the top left corner of the upper front panel, behind the illuminated display. The left switch controls the two freezing cylinders on the left side of the unit. The right switch controls the two freezing cylinders on the right side of the unit. When placed in the ON position, these control switches allow SLUSHTECH operation.

Liquid Crystal Displays

There are two Liquid Crystal Displays (LCD's) located on the upper front panel behind the illuminated display. The two LCD's display information for the two freezing cylinders located directly beneath them. These pairs of freezing cylinders are each labeled "left" and "right" per LCD.

The LCD's show the current operating mode of the freezing cylinders. They also indicate whether there is enough syrup, CO₂, and water being supplied to the freezer. If an error in the machine operation occurs, a warning tone will sound and the word "FAULT" will flash on the third line of the display.

Operational Mode Displays

The screens below illustrate the operational mode information displayed during normal operation. The two LCD's display information corresponding to the two freezing cylinders located directly beneath them. These pairs of freezing cylinders are each labeled "left" and "right" per LCD.

When the unit is plugged into the wall receptacle and the control switch is in the ON position, this screen appears.

SAFETY TIMEOUT ANY KEY ABORT

This display will remain on the LCD for 60 seconds unless a key is pressed. If any key is pressed (or 60 seconds passes) then the next screen appears.

OFF MODE OFF OK SYRUP OK
CO2-OK WATER-OK

Note: Syrup, CO₂ and water are satisfied.

Pressing the AUTO (-->) keys for each freezing cylinder will display this screen.

AUTO	MODE	AUTO
OK	SYRUP	OK
CO2-OK		WATER-OK

Line 1 indicates the operating mode for each freezing cylinder.

Line 2 indicates the status of the syrup systems in each freezing cylinder. As long as syrup is available, the word "OK" will appear on the LCD. When the syrup supply is insufficient, the word "OUT" will flash on the LCD. The same rules apply to the fourth line which indicates the status of the CO_2 and the H_2O .

The third line of this display is a fault indicator. If an error in machine operation occurs, the word "FAULT will be displayed on the LCD.

BEATER	MODE	BEATER
OUT	SYRUP	OUT
FAULT		FAULT
CO2-OUT		H2O-OUT

Note: Repeat all information and programming procedures for each individual control from the left to the right.

Operator Menu Display

The **OPERATOR MENU** is used to enter into the operating screens. To access the OPERATOR MENU, simply press the MENU (SEL) key. The cursor will flash under the letter "A", indicating that this is screen A. To select a different screen, use the AUTO (-->) and OFF (<--) keys to move the cursor to the desired screen selection and press the MENU (SEL) key.



Operator Menu Timeout

If the display is left in the operator menu or any of the operator menu selections, except for Current Conditions, the display will return to the system mode screen 60 seconds after the last keypress. The Current Conditions screen will be displayed until manually changed.

Finding Current Fault Conditions

Screen B is FAULT DESCRIPTION. The fault description will indicate if there is a fault in one of the freezing cylinders. When the actual fault is corrected, the warning tone will stop. Only "BRL NOT COOLING" requires pressing the OFF (<- -) key to clear the fault message and the warning tone.

Fault Messages		
Beater Overload	Beater is out on overload.	
Chk Refrig Sys Psi	Out on compressor high pressure cut-out.	
Thermistor Short	Shorted thermistor probe.	
Thermistor Open	Open thermistor probe.	
H2O Pressure Low	Water pressure is low.	
CO2 Pressure Low	CO ₂ pressure is low.	
Syrup Pressure Low	Syrup is no longer present.	
BRL Temp 2 High	Freezing cylinder temperature is above 120°F (49°C).	
BRL Not Cooling	Freezing cylinder is not cooling after 5 minutes.	
No Fault Found	No fault conditions are apparent.	

The following are explanations of the possible faults and the display screens. Lines 2 and 3 indicate the faults found in freezing cylinders 1 and 2 respectively.

NO FAULT FOUND - No fault conditions are apparent.

FAULT DESCRIPTION
L: NO FAULT FOUND
R: NO FAULT FOUND
CLR +++ SEL

 BEATER OVERLOAD - Beater motor is out on overload. When this fault occurs, the affected side of the machine automatically turns off. The fault clears when the condition is corrected.

FAULT DESCRIPTION
L: BEATER OVERLOAD
R: BEATER OVERLOAD
CLR +++

SEL

 CHK REFRIG SYS PSI - Compressor is out on high head pressure. When this fault occurs, the machine automatically turns off. The fault clears when the condition is corrected.

FAULT DESCRIPTION
L: CHK REFRIG SYS PSI
R: CHK REFRIG SYS PSI
CLR +++ SEL

4. **THERMISTOR SHORT** - One or both of the barrel (freezing cylinder) thermistor probes are faulty.

FAULT DESCRIPTION
L: THERMISTOR SHORT
R: NO FAULT FOUND
CLR +++ SEL

 THERMISTOR OPEN - One or both of the barrel (freezing cylinder) thermistor probes are faulty.

FAULT DESCRIPTION
L: THERMISTOR OPEN
R: NO FAULT FOUND
CLR +++ SEL

6. **SYRUP PRESS LOW** - When the syrup out indicator displays a lack of syrup, the barrel will enter a HOLD mode. At this time, no refrigeration or product flow from the flow control will be allowed. Only the beater will operate. When the syrup is satisfied the barrel will refill the product tank and then automatically return to the AUTO mode. The fault message and the warning tone will clear. (See "Syrup Out Indicator" on page 17.)

FAULT DESCRIPTION
L: NO FAULT FOUND
R: SYRUP PRESS LOW
CLR ++

SEL

7. CO₂ PRESSURE LOW - When the CO₂ out indicator displays a lack of CO₂, a 60 second internal timer will start. If the CO₂ is not replenished at the end of the 60 seconds, both freezing cylinders will shut down and this fault message will appear. Replenish the CO₂ and the fault message and warning tone will clear.

FAULT DESCRIPTION
L: CO2 PRESSURE LOW
R: CO2 PRESSURE LOW
CLR +++

SEL

8. H₂O PRESSURE LOW - When the water out indicator displays a lack of water, a 60 second internal timer will start. If the water is not replenished at the end of the 60 seconds, all freezing cylinders will shut down and this fault message will appear. Replenish the water and the fault message and warning tone will clear.

FAULT DESCRIPTION
L: H2O PRESSURE LOW
R: H2O PRESSURE LOW
CLR +++

SEL

9. BRL NOT COOLING - A freezing cylinder check has been established for the AUTO mode of operation. If a freezing cylinder enters the AUTO mode, the control will check product temperature. After five minutes, it will again check product temperature. If product temperature does not drop in that five minute time span, the freezing cylinder will shut down and this message will appear on the fault screen. For this check to be valid, the product temperature must be above 40°F (4.4°C).

FAULT DESCRIPTION
L: BARREL NOT COOLING
R: NO FAULT FOUND
CLR +++

SEL

SEL

10. **BRL TEMP 2 HIGH** - A maximum allowable product temperature has been established to prevent product from excessive heating. If the product exceeds 120°F (49°C) temperature for any reason (in any mode of operation), the entire unit shuts down.

FAULT DESCRIPTION
L: BARREL TEMP 2 HIGH
R: NO FAULT FOUND
CLR +++

Faults, when corrected, are cleared from the fault description screen, with the following exception: BRL NOT COOLING. This fault requires the operator to press the OFF (<- -) key (when in the FAULT DESCRIPTION screen) in order for the fault to discontinue.

To see if there is more than one fault in either freezing cylinder, press the PRIME (+ + +) key. To return to the OPERATOR MENU, press the MENU (SEL) key once. To return to the Main Screen, use the AUTO (-->) key to cycle to MENU ITEM A, then press the MENU (SEL) key.

Screen C is SET CLOCK. Use the AUTO (-->) and OFF (<--) keys to place the cursor under the element to be set (hours, minutes, month, day, or year). Use the PRIME (+++) and BEATER (---) keys to increment or decrement the value. Press the MENU (SEL) key to advance to the Daylight Saving Time screen.

Note: The clock is programmed with military time.

SET CLOCK 14:30 2/25/04 <----> +++ --- SEL

This screen will appear if an invalid date is entered. (example: If the date entered exceeds the days of that month.)

SET CLOCK 14:30 02/31/04 INVALID DATE SEL

This screen allows the Daylight Saving Time options. If the Daylight Saving Time option is enabled, then the time will be advanced by one hour at 2:00 a.m. on the first Sunday in April, and will be retarded by one hour at 2:00 a.m. on the last Sunday in October.

DAYLIGHT SAVING TIME
ENABLE
OISABLE
SEL

Screen D is MANUAL DEFROST. This screen allows the operator to **manually defrost** the left freezing cylinders under each LCD.

Place the cursor under YES, press the MENU (SEL) key, and the command will be executed.

MANUAL DEFROST
LEFT SIDE

YES
NO
SEL

Repeat the procedure for the right freezing cylinder under each LCD.

MANUAL DEFROST YES NO

Note: Only one freezing cylinder per LCD may be placed in the DEFROST mode at a given time. Attempting to place more than one freezing cylinder into DEFROST will result in the following screen:

ALREADY IN DEFROST

Press the MENU (SEL) key to return the unit to the OPERATOR MENU.

Screen E is SYSTEM INFORMATION. It consists of 6 display features.

The first feature indicates the **software version**.

SYSTEM INFORMATION C300 CONTROL UVC2 VERSION 1.00

SEL

The second feature indicates the bill of material number and the serial number.

It also indicates if the unit is equipped with a water pressure switch.

B.O.M. C30227C000 S/N K0000000 WITH H20 PRESS SW

SEL

SEL

The third feature indicates the version number of the language and text.

SYSTEM INFORMATION LANGUAGE VERSION 1.09 ENGLISH 446 The fourth feature will display the **Power Saver Mode, OFF, REST,** or **STANDBY** status.

If the Power Saver Mode is OFF, the following screen will be displayed.

POWER SAVER MODE OFF

If a Power Saver Mode is programmed, one of the following screens will appear.

SEL

POWER SAVER REST

CYCLE 1 SUN 01:00

SUN 08:30

+++ --- SEL

POWER SAVER STANDBY
CYCLE 1 SUN 01:00
SUN 08:30
+++ --- SEL

The fifth feature will indicate the left side defrost time and which day(s) the defrost will occur.

DEFROST TIME LEFT
CYCLE 1 ALL 09:00
+++ --- SEL

The sixth feature will indicate the right side defrost time and which day(s) the defrost will occur.

DEFROST TIME RIGHT
CYCLE 1 ALL 10:00
+++ --- SEL

Press the MENU (SEL) key to return to the OPERATOR MENU.

Screen F is CURRENT CONDITIONS. This screen displays the current viscosity and product temperature for each freezing cylinder. An **asterisk** will indicate which side is refrigerating. Press the MENU (SEL) key to return to the OPERATOR MENU.

Note: Viscosity is checked only when product temperature is below $40^{\circ}F/4.4^{\circ}C$.

CURRENT CONDITIONS L*1200Hd 27.3F R*2140Hd 27.3F

Screen G is FAULT HISTORY. This option provides a record of the last 20 faults. The display also indicates the date and time each fault occurs.

FAULT HISTORY 1
02/25/04 08:34
NO FAULT FOUND
<-- --> +++ --- SEL

Press the AUTO (- ->) and OFF (<- -) keys to increase or decrease the **fault page**.

Page numbers are located in the upper right hand corner of the display. The most recently recorded fault will appear on page 1. The fault **description** is listed on the third line of the fault page.

FAULT HISTORY 2
02/25/04
R SYRUP PRESS LOW 08:33
<-- --> +++ --- SEL

Press the AUTO (- ->) key to move to the next screen. The next screen will indicate when the fault was satisfied.

 FAULT HISTORY
 2

 02/25/04
 14:06:19

 RESTORED FROM FAULT
 SEL

Press the MENU (SEL) key to return to the OPERATOR MENU.

Screen H is RINSE/SANITIZE. This screen allows the operator to rinse or sanitize the freezing cylinder(s).

	RINSE / SANITIZE	
RINSE	SANITIZE	EXIT
<>		SEL

Use the AUTO (-->) and OFF (<--) keys to select either RINSE or SANITIZE, and then press the MENU (SEL) key.

	SANITIZE	
LEFT SIDE	YE	S NO
<>		SEL

Use the cursor keys to select YES or NO, then press the MENU (SEL) key.

	SANITIZE		
RIGHT SIDE		YES	NO
<>		SEL	

Repeat for the right side of the unit.

Screen I is SERVICE MENU. This screen allows the authorized service technician to access service information. Press the MENU (SEL) key to return to the OPERATOR MENU.

OPERATOR MENU

A B C D E F G H

SERVICE MENU

----> SEL

Syrup Out Indicator

AUTO	MODE	AUTO
OUT	SYRUP	OK
СО2-ОК		WATER-OK

If the word "OUT" appears in one of the columns next to the word "SYRUP", it indicates a lack of syrup or syrup pressure being supplied for the indicated freezing cylinder. If the unit is in the AUTO or PRIME modes, the product light will illuminate and a warning tone will sound for that freezing cylinder. At this time, replace the appropriate bag-in-the-box. As a safety feature, the refrigeration system automatically stops to prevent a freeze-up in the freezing cylinder (barrel).

If a syrup out condition occurs on one barrel, that barrel will enter the HOLD mode. During the HOLD mode, refrigeration remains off, the beater continues to run, and the CO_2 solenoid for that barrel is closed to prevent the dispensing of product. The opposite barrel will not be affected.

CO₂ Out Indicator

AUTO MODE AUTO OK SYRUP OK CO2-OUT WATER-OK

On the LCD, if the word "OUT" appears next to the word " CO_2 " it indicates a lack of CO_2 being supplied to the freezer. The product light will also illuminate and a warning tone will sound. This will continue until the CO_2 is replaced. If the CO_2 is not replaced within one minute, the machine will shut down and a fault message will appear.

Water Out Indicator

AUTO	MODE	AUTO
OK	SYRUP	OK
CO2-OK		WATER-OUT

On the LCD, if the word "OUT" appears next to the word "WATER", it indicates a lack of water being supplied to the freezer. In addition, the product light will illuminate and a warning tone will sound. This will continue until the proper amount of water is supplied to the freezer. If the water is not supplied within one minute, the machine will shut down and a fault message will appear.

Audio Alarm Silencer

The audio alarm will be disabled if the ALARM SILENCE key is pressed. If a new fault or fault condition occurs or the system mode changes, the audio alarm will be re-enabled automatically. If the audio alarm is silenced for greater than 30 minutes without correcting the fault, it will be re-enabled automatically.

Product Light

When the light is continuously lit (not flashing) it indicates that there is an "OUT" condition for syrup, water, or CO₂.

When the light is flashing, it indicates that the product is not at serving viscosity. This will occur during the initial freeze down, a defrost cycle and a FAULT condition and during power saver modes.

Sampling Valve

The sampling valve is located behind the lower front panel. The sampling valve is used to obtain a brix reading.

Daily Procedures

The following procedure should be performed daily.

Remove the splash shield and front drip tray. Take these parts to the sink and brush-clean them. Re-install the parts onto the freezer. Use a clean, sanitized towel and wipe down the front of the machine, including the doors and spouts.

Section 6

Operating Procedures

The Model C302 contains four 7 quart (6.6 liter) freezing cylinders.



when in operation. The control switches must be in the OFF position until the unit is completely assembled. No part should ever be removed from the machine while it is in operation. No parts should be removed until the control switch has been turned to the OFF position and all pressure has been relieved by opening the draw valves. Failure to follow this instruction may result in severe personal injury from hazardous moving parts or from the impact of propelled parts.

The syrup flow control combines the two ingredients of carbonated water and syrup, and sends this combination to the freezing cylinder. As product is drawn, new product will flow from the flow control into the freezing cylinder.

We begin our instructions at the point where the parts are disassembled and laid out to air dry.

The following procedures will show you how to assemble the parts into the freezer, sanitize them, and prime the freezer with fresh product.

Duplicate the following procedures, where they apply, for the other freezing cylinders.

If you are disassembling the machine for the first time or need information to get to this starting point in our instructions, turn to page 31, "Disassembly" and start there.

Assembly



Note: When lubricating parts, use an approved food grade lubricant (example: Taylor Lube HP).

Step 1

Before installing the beater drive shaft, lubricate the o-ring groove. Slide the o-ring into the groove on the drive shaft. Lubricate the drive shaft seal groove, the o-ring, and the shaft portion that comes in contact with the bearing on the beater drive shaft. **DO NOT** lubricate the hex end of the drive shaft.

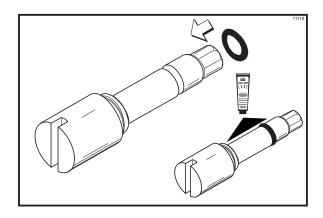


Figure 6

Lubricate the inside diameter of the drive shaft seal. Install the drive shaft seal bushing in the drive shaft seal.

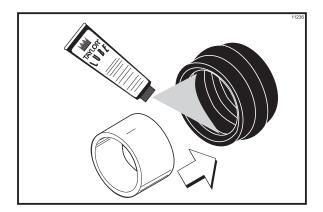


Figure 7

Note: The drive shaft bushing must be positioned in the center of the drive shaft seal.

Step 3

Slide the seal and bushing over the shaft and groove until it snaps into place. Fill the inside portion of the seal with more lubricant and evenly lubricate the end of the seal that fits onto the rear shell bearing.

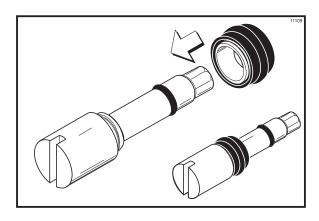


Figure 8

Step 4

Insert the beater drive shaft into the freezing cylinder, hex end first, and into the rear shell bearing until the seal fits securely over the rear shell bearing. Be certain the drive shaft fits into the drive coupling without binding.

IMPORTANT: Remove any excess lubricant from the seal.

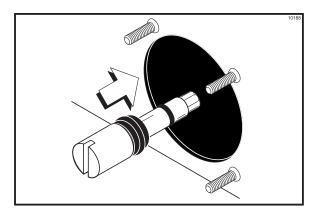


Figure 9

Step 5

Before installing the beater assembly, check the scraper blades for any nicks or signs of wear. If any nicks are present or if the blade is worn, replace both blades. If the blades are in good condition, place the scraper blades over the holding pins on the beater.

Note: Each hole on the scraper blade must fit securely over each pin.

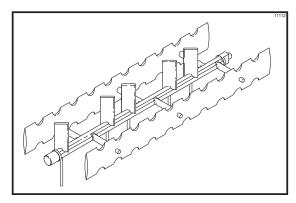


Figure 10

Align the flats on the end of the beater assembly with the drive shaft. Make sure the beater assembly locating pin is in position in the locating hole of the drive shaft. Turn the beater slightly to be certain that the beater is properly seated. When in position, the beater will be approximately 3/8" inside the front of the freezing cylinder.

Important: Failure to properly seat the beater may cause damage to the beater and the door.

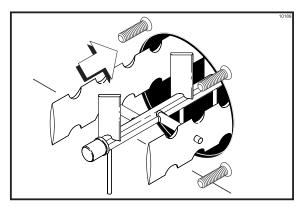


Figure 11

Note: The scraper blades on the beater assembly should be in the 6 and 12 o'clock positions. This will enable freezer door installation.

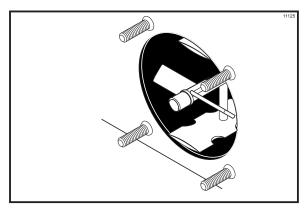


Figure 12

Step 7

Before installing the draw valve, slide the two o-rings into the grooves on the draw valve. Lubricate the o-rings and the valve as illustrated below.

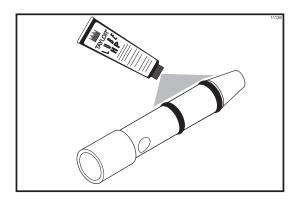


Figure 13

Step 8

Insert the draw valve into the freezer door spout from the front of the unit. The valve is properly installed when the hole in the draw valve is visible in the slot of the freezer door spout.

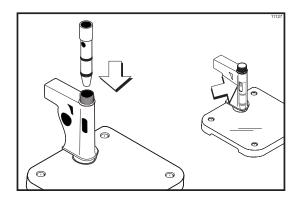


Figure 14

Snap the draw valve handle onto the door spout. Align the hole in the draw valve with the slot in the draw handle.

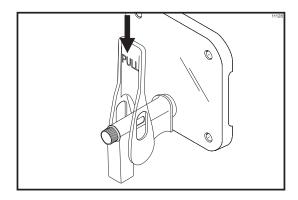


Figure 15

Step 10

Slide the pivot pin through the draw handle and into the draw valve.

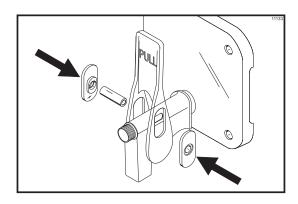


Figure 16

Step 11

Place the draw handle slide over the opening in the draw handle and the pivot pin. Secure the assembly with screws.

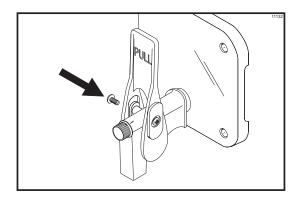


Figure 17

Step 12

Insert the spring into the front of the door spout.

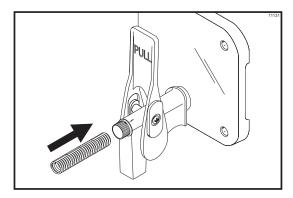


Figure 18

Step 13

Place the threaded cap on the end of the draw valve cavity. Turn the cap clockwise until it is secure.

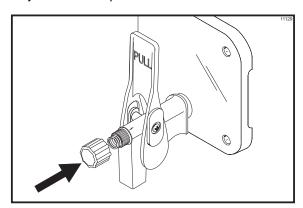


Figure 19

Install the prime plug. Place the two o-rings on the prime plug and lightly lubricate.

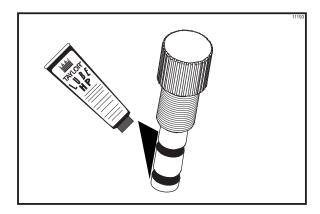


Figure 20

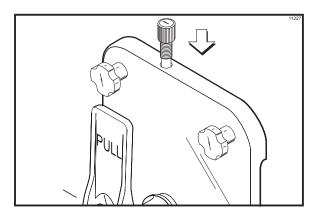


Figure 21

Step 15

Place the large o-ring into the door groove and lightly lubricate.

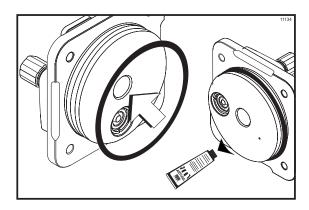


Figure 22

Note: Every four months or less, discard the o-rings and install new o-rings.

Step 16

Install the front bearing. **Do not** lubricate the front bearing.

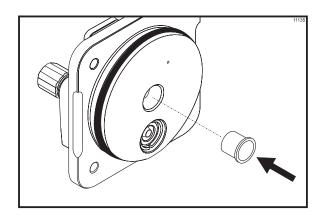


Figure 23

Step 17

Install the freezer door. Position the door on the four studs on the front of the freezing cylinder. Firmly push the door into place. Install the four handscrews on the studs and finger-tighten them equally in a criss-cross pattern to insure that the door is snug. **Do not over-tighten the handscrews.**

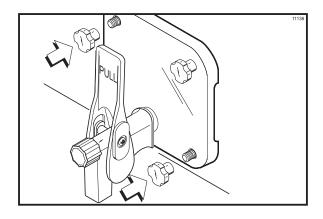


Figure 24

Step 18

Repeat Steps 1 through 17 for the other freezing cylinders.

Operating Procedures

Sanitizing

IMPORTANT: If a unit is sanitized, and will not be used for an extended period of time, clean water should be used to flush all sanitizer from the lines. Remove the water from all the lines and components prior to storage of the unit. Upon return to service, the unit must be sanitized prior to use.

Note: The following instructions are for one side of the unit. Each side consists of two freezing cylinders each, identified on the corresponding LCD as "left" (L) and "right" (R).

Step 1

Open the lighted display door. Place the control switch in the ON position.

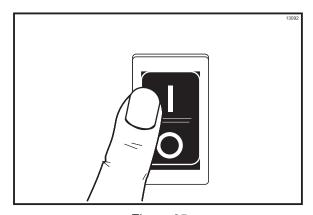


Figure 25

Step 2

Prepare two gallons (7.6 liters) of an approved 100 PPM sanitizing solution (examples: Kay-5® or Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.

Important: Make sure the sanitizer is completely dissolved.

Step 3

Using an empty bag of syrup, cut the syrup line connector from the end of the bag.

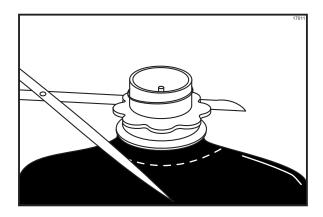


Figure 26

Step 4

Connect the syrup line to the syrup line connector that was cut from the syrup bag.

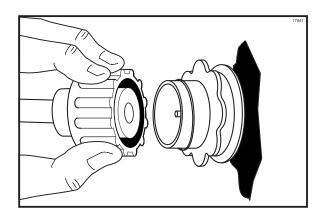


Figure 27

With the bag connector attached to the syrup line, place the syrup line into the pail of sanitizing solution.

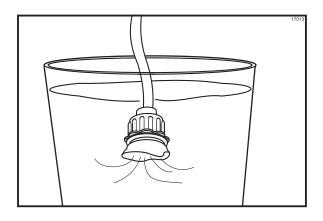
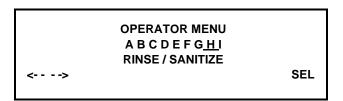


Figure 28

Step 6

To place the left freezing cylinder in the SANITIZE mode, press the MENU (SEL) key. Move the cursor by pressing the AUTO (-->) key until the third line indicates RINSE / SANITIZE.



Step 7

Press the MENU (SEL) key. Move the cursor under the word "SANITIZE" by pressing the OFF (<- -)key.

	RINSE / SANITIZE	
	KINGE / SANTIZE	
RINSE	SANITIZE	EXIT
<>		SEL

Step 8

Pressing the MENU (SEL) key will give you the option for sanitizing the left freezing cylinder. Move the cursor under the word "YES". Pressing the MENU (SEL) key at this time will start the flow of sanitizing solution into the left freezing cylinder.

	SANITIZE		
LEFT SIDE		YES	NO
<>			SEL

Step 9

Repeat Steps 6 - 8 for the right freezing cylinder.

Note: There is a left and a right freezing cylinder for each LCD.

	SANITIZE		
RIGHT SIDE		YES	NO
<>			SEL

Step 10

Open the prime plugs. Place an empty pail under the door spouts. When sanitizing solution fills the freezing cylinders approximately 2/3 full, close the prime plugs.

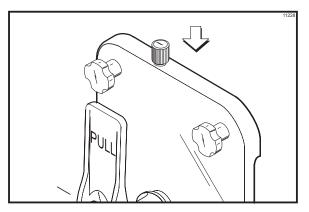


Figure 29

Step 11

Continue filling the freezing cylinders with sanitizing solution until the solution purges out of the relief valve at the top of the mix tank, and begins draining into the front drip tray. Press the OFF (<- -) key.

Press the BEATER (- - -) key. Agitate the solution in the freezing cylinders for five minutes.

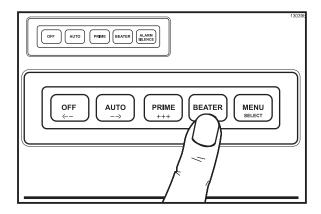


Figure 30

Step 13

With a pail beneath the door spouts, open the draw valves and drain all the solution from the freezing cylinders. Press the OFF (<- -) key and close the draw valves.

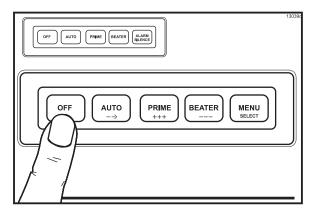


Figure 31

Step 14

Disconnect the syrup connectors in the sanitizing solution.

Step 15

Repeat these steps for the other side of the machine.

Priming/Brixing

Step 1

Connect the syrup line to the Bag-in-Box (BIB) syrup.

Step 2

Remove the drip tray, splash shield and the lower front panel to gain access to the syrup sampling valves.

Step 3

Open the prime plug.

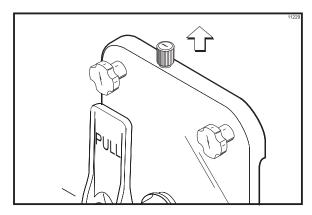


Figure 32

Step 4

Place the sampling valve in the OFF (center) position.

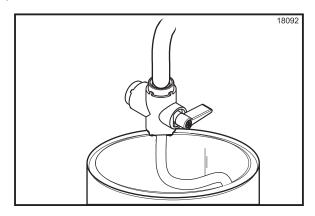


Figure 33

Press the PRIME (+ + +) key.

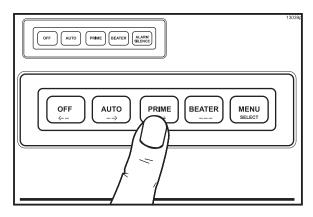


Figure 34

Step 6

Slowly move the syrup sampling valve to the fully open position by turning the handle "down" toward the sampling line. Allow the liquid to run into a pail until all the sanitizer is removed and full strength product is flowing.

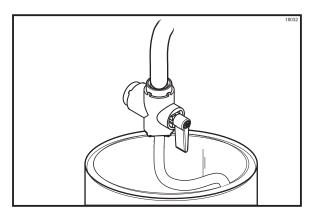


Figure 35

Brix is the ratio of syrup to water which will directly affect the quality and taste of the product. Brixing should be done before priming the freezer and when a change in syrup flavor has been made.

Step 7

Pour the product from the syrup sampling valve into a cup. Close the syrup sampling valve by turning the handle to the center position.

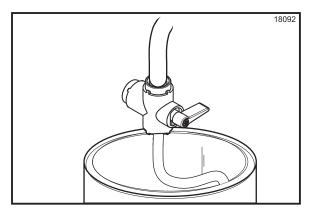


Figure 36

Step 8

Stir the finished product. Pour a small amount of product over the refractometer. The brix reading should register 13 to 14. A reading higher than this would cause a darker, richer product. The refrigeration system would have to run longer to freeze this excess syrup. A reading lower than this could cause a freeze-up in the freezing cylinder because of the excess water.

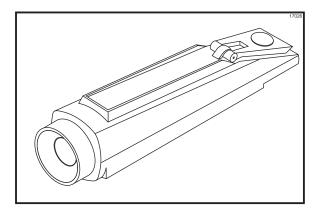


Figure 37

To adjust the brix, turn the adjustment screw located behind the drip tray shelf. Clockwise adjustments increase the amount of syrup to water, and counterclockwise adjustments decrease the amount of syrup to water. Adjust the screw in small increments and check the brix again.

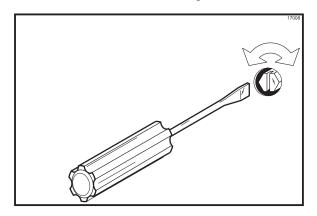


Figure 38

Repeat this step until a correct brix reading is registered.

Step 10

Once the proper brix has been achieved, turn the handle "up" to allow product to flow to the mix tank.

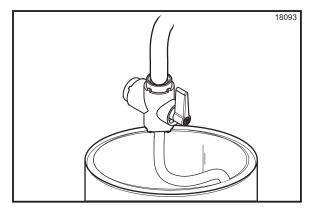


Figure 39

Note: The position of the handle on the syrup sampling valve determines the direction of product flow. The down position opens the syrup sampling valve for collecting brix samples. The center position shuts off the product flow. The up position directs the flow of product to the freezing cylinder.

Step 11

Place a pail beneath the door spout. Open the draw valve and drain the freezing cylinder to remove any incorrectly brixed product. Close the draw valve.

Step 12

Press the PRIME (+ + +) key. Allow the liquid level to fill to the prime plug hole.

Step 13

Repeat these steps for the other freezing cylinders.

Step 14

To place the freezing cylinders in the AUTO mode, press the AUTO (-->) key for each freezing cylinder. When the unit cycles off, the product will be at serving viscosity.

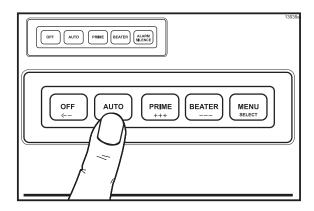


Figure 40

Close the illuminated display when complete. Replace the panels and the hood, and attach with screws. Install the front drip tray and the splash shield on the front of the freezer.

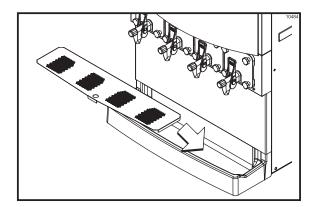


Figure 41

120 Day Closing Procedure

We recommend that the machine be completely disassembled and cleaned at least every 120 days using the following procedures.



To disassemble the Model C302, the following items will be needed:

- Two cleaning pails
- Necessary brushes (provided with freezer)
- Cleaner
- Single service towels

Draining Product From the Freezing Cylinders

Step 1

Press the BEATER (- - -) key. This will allow the beater to operate and CO_2 pressure will be maintained to push the product from the freezing cylinder. Open the draw valve and drain the product from the machine until the CO_2 begins to jet.

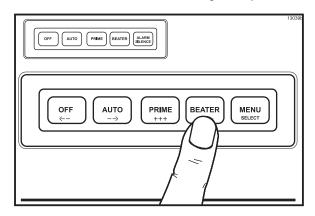


Figure 42

Step 2

When all the product has been drained from the freezing cylinder, close the draw valve and press the OFF (<- -) key. Discard this product.

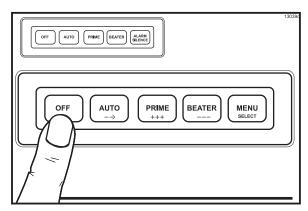


Figure 43

Step 3 Repeat Steps 1 and 2 for the other freezing cylinders.

Rinsing

Note: The following instructions are for one pair of freezing cylinders under an LCD. After the instructions are complete, repeat for the two freezing cylinders on the other side of the machine under the other LCD.

Step 1

To place the left cylinder in the RINSE mode, press the MENU (SEL) key. Move the cursor by pressing the AUTO (-->) key until the third line indicates RINSE / SANITIZE.

OPERATOR MENU

A B C D E F G H I

RINSE / SANITIZE

<---->

SEL

Step 2

Press the MENU (SEL) key. Move the cursor under "RINSE" by pressing the OFF (<- -) key twice.

	RINSE / SANITIZE	
RINSE	SANITIZE	EXIT
<>		SEL

Step 3

Pressing the MENU (SEL) key will give you the option for rinsing the left freezing cylinder. Move the cursor under the word "YES". Pressing the MENU (SEL) key at this time will start the beater motor and deliver water and CO_2 to the left cylinder.

	RINSE	
LEFT SIDE	YES	NO
<>		SEL

Step 4

Allow the rinse water to flow into the cylinder until it is approximately 2/3 full. With a pail under the door spout, open the draw valve and drain the rinse water. **Repeat this procedure** until the rinse water being drawn is clear.

Step 5

Repeat Steps 3 - 4 for the right freezing cylinder.

Note: There is a left and a right freezing cylinder for each LCD.

	RINSE		
RIGHT SIDE		YES	NO
<>			SEL

Step 6

When draining is complete, press the OFF (<- -) key.

Step 7

Repeat these steps for the other side of the machine.

Cleaning

Note: The following instructions are for one pair of freezing cylinders under an LCD. After the instructions are complete, repeat for the two freezing cylinders on the other side of the machine under the other LCD.

Step 1

Prepare two gallons (7.6 liters) of an approved cleaning solution (examples: Kay-5® or Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.

Important: Make sure the cleaner is completely dissolved.

Step 2

Pour the cleaning/sanitizing solution into a clean, empty pail. Place the syrup line with the old syrup connector into the pail of cleaner.

Step 3

To place the left freezing cylinder in the SANITIZE mode, press the MENU (SEL) key. Move the cursor by pressing the AUTO (-->) key until the third line indicates RINSE / SANITIZE. Press the MENU (SEL) key. Move the cursor under the word "SANITIZE".

	RINSE / SANITIZE	
RINSE	SANITIZE	EXIT
<>		SEL

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Pressing the MENU (SEL) key will give you the option to sanitize the left cylinder. Move the cursor under the word "YES". Pressing the MENU (SEL) key at this time will start the flow of cleaner/sanitizer through the syrup system into the freezing cylinder.



Step 4 Repeat this procedure for the right freezing cylinder.

Note: Both sides of the machine have an LCD for the two freezing cylinders located directly below it. There is a left and a right freezing cylinder for each LCD.

Step 5

Open the prime plugs. Allow each cylinder to fill approximately 2/3 full. Close each prime plug.

Step 6

Continue filling the freezing cylinders with sanitizing solution until the solution purges out of each relief valve, and begins draining into the front drip tray. The relief valves are located at the top of each mix tank. Press the OFF (<- -) key.

Step 7

Press the BEATER (- - -) key to agitate the solution in each freezing cylinder for five minutes.

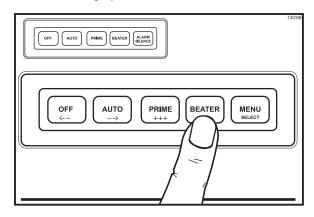


Figure 44

Step 8

With a pail beneath the door spouts, open the draw valves and drain all the solution from the the freezing cylinders. Press the OFF (<- -) key and close the draw valves.

Step 9

Repeat these steps for the other side of the machine.

Disassembly

MAKE SURE THE CONTROL SWITCHES ARE IN THE "OFF" POSITION. Failure to do so may result in personal injury or component damage.

Step 1

Open the draw valves to make sure all pressure has been relieved.

Step 2

Open the prime plugs. Leave the prime plugs open when removing the freezer doors to insure that all pressure is relieved from the freezing cylinders.

Step 3

Remove the following parts from the freezer and take them to the sink for brush cleaning.

- handscrews
- freezer doors
- beater assemblies and scraper blades
- · drive shafts and boot seals
- front drip tray
- splash shield

Brush Cleaning

Step 1

Prepare a sink or a pail with an approved cleaning solution. USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS (examples: Kay-5® or Stera-Sheen®).

IMPORTANT: Follow the label directions. Too STRONG of a solution can cause parts damage, while too MILD of a solution will not provide adequate cleaning. Make sure all brushes provided with the freezer are available for brush cleaning.

Step 2

Return to the freezer with a small amount of cleaning solution. With a single service towel, wipe clean the rear shell bearing surface. Brush-clean the rear shell bearings at the back of the freezing cylinders with the black bristle brush.

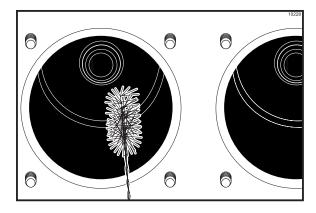


Figure 45

Step 3

Remove the:

- seals and o-rings from the drive shafts
- drive shaft seal bushings from drive shaft seals
- · caps and springs from freezer doors
- screws and draw handle slides from freezer doors
- pivot pins from draw valves
- draw valve handles from freezer doors
- draw valves from freezer doors
- · o-rings from draw valves
- prime plugs from freezer doors
- o-rings from prime plugs
- o-rings and front bearings from freezer doors

Discard all o-rings and replace them with new ones.

Note: To remove o-rings, use a single service towel to grasp the o-ring. Apply pressure in an upward direction until the o-ring pops out of its groove. With the other hand, push the top of the o-ring forward. It will roll out of the groove and can be easily removed. If there is more than one o-ring to be removed, always remove the rear o-ring first. This will allow the o-ring to slide over the forward rings without falling into the open grooves.

Step 4

Using a single-service towel, wipe the lubricant off the parts. Brush-clean all disassembled parts in the cleaning solution. Make sure all lubricant and syrup is removed. Place all the cleaned parts on a clean, dry surface to air-dry.

Step 5

Wipe clean all the exterior surfaces of the freezer.

Section 7 Important: Operator Checklist

During Cleaning and Sanitizing

	Î	/
_	_	_

ALWAYS FOLLOW LOCAL HEALTH CODES

Cleaning and sanitizing schedules are governed by your State or local regulatory agencies and must be followed accordingly. The following check points should be stressed during the cleaning and sanitizing operations.

WE RECOMMEND CLEANING AND SANITIZING EVERY 120 DAYS.

Troubleshooting Bacterial Count

- 1. Thoroughly clean and sanitize the machine regularly, including complete disassembly and brush cleaning.
- Use all brushes supplied for thorough cleaning. The brushes are specially designed to reach all product passageways.
- 3. Use the black bristle brush to thoroughly clean the rear shell bearing located at the rear of the freezing cylinder. Be sure there is a generous amount of cleaning solution on the brush.
- 4. Using a screwdriver and a cloth towel, keep the rear shell bearing and the female hex drive socket clean and free of lubricant and product deposits.
- 5. Properly prepare the cleaning and sanitizing solutions. Read and follow the label directions carefully. Too strong of a solution may damage the parts and too weak of a solution will not do an adequate job of cleaning or sanitizing.

- 6. Clean and sanitize the syrup lines regularly to prevent syrup residue build-up that would restrict the proper flow of syrup.
- ☐ 7. On a regular basis, take a brix reading to assure a consistent quality product.

Regular Maintenance Checks

- 1. Replace scraper blades that are nicked, damaged or worn down.
- 2. Before installing the beater, be certain that the scraper blades are properly attached over the pins.
- 3. Check the rear shell bearing for signs of wear (excessive product leakage from the rear drip pans to the front drip tray).
- 4. Dispose of o-rings or seals if they are worn, torn, or fit too loosely, and replace with new ones.
- ☐ 5. Follow all lubricating procedures as outlined in "Assembly".
- 6. Check the condenser for an accumulation of dirt and lint. A dirty condenser will reduce the efficiency and capacity of the machine. The condenser should be cleaned **monthly** by removing the poly-flo filter and cleaning it.

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Winter Storage

If the place of business is to be closed during the winter months, it is important to protect the freezer by following certain precautions, particularly if the building is subject to freezing conditions.

Disconnect the freezer from the main power source to prevent possible electrical damage.

Your local Taylor Distributor can perform this service for you.

Wrap detachable parts of the freezer such as the beater, the scraper blades, the drive shaft, and the freezer door. Place these parts in a protected, dry place. Rubber trim parts and gaskets can be protected by wrapping them with moisture-proof paper. All parts should be thoroughly cleaned of dried mix or lubrication which attract mice and other vermin.

Note: It is recommended that an authorized service technician perform winter storage draining, to insure all water has been removed. This will guard against freezing and rupturing of the components.

Section 8

Troubleshooting Guide

	PROBLEM	PROBABLE CAUSE	REMEDY	PAGE REF.
1.	Product is too stiff.	a. Too much water to syrup ratio. Improper brix adjustment.	Adjust the brix accordingly.	27
		 b. Consistency control needs adjustment. 	b. Contact a service technician.	
		 c. Torque coupling bound in WARM position. 	c. Contact a service technician.	
2.	Product is too soft.	a. Freezer in a defrost cycle.	Wait for defrost cycle to end.	
		 b. Consistency control needs adjustment. 	b. Contact a service technician.	
		c. Torque coupling bound in COLD position.	c. Contact a service technician.	
		 d. Broken springs in torque coupling. 	d. Contact a service technician.	
3.	No product is being dispensed.	a. Product frozen-up in freezing cylinder.	a. See problem No. 1.	
4.	Freezer will not operate in the BEATER or AUTO mode.	a. Unit is unplugged.	a. Check the plug at wall receptacle.	
		b. Blown fuse, or the circuit breaker is off.	b. Replace the fuse or turn the breaker on.	
		 c. Beater motor is out on overload. Check fault description screen. 	c. Allow the motor to cool. Press the AUTO (>) key. Call a service technician if the beater motor goes out on overload again.	13
5.	No compressor operation in the AUTO mode.	Beater motor is out on overload. Check the fault description screen.	a. Allow the motor to cool. Press the AUTO (>) key. Call a service technician if the beater motor goes out on overload again.	13
		 b. The torque coupling is bound in the COLD position. 	b. Contact a service technician.	
		c. Condenser dirty, A/C.	c. Clean condenser monthly.	33
		d. Water supply off, W/C.	d. Turn the water on.	

	PROBLEM	PROBABLE CAUSE	REMEDY	PAGE REF.
6.	Unable to remove the drive shaft from the rear shell bearing.	Rounded corners of hex end of drive shaft, drive coupling, or both.	Replace the drive shaft, or call a service technician to replace the direct drive unit.	
		 b. Lubrication of hex end of drive shaft. 	b. Do not lubricate the hex end. If necessary, contact a service technician for removal.	19
7.	Excessive loss of CO ₂ .	a. Leak in the CO ₂ system.	a. Contact a service technician.	
8.	Leakage from rear drip pan(s) into front drip tray.	 Seal or o-ring on drive shaft is worn, missing, or incorrectly installed. 	Replace or install correctly on drive shaft.	19
		b. Worn rear shell bearing.	b. Contact a service technician to replace rear shell bearing.	
9.	Excessive mix leakage from door spout.	a. Inadequate lubrication of draw valve o-rings.	a. Lubricate properly.	21
		 b. Wrong type lubricant on draw valve o-rings. 	b. Use food grade lubricant (example: Taylor Lube HP).	19
		c. Worn or missing draw valve o-rings.	c. Replace or install o-rings on draw valve.	21/37
10	. Unable to adjust brix.	Syrup lines need to be cleaned and sanitized.	a. Clean and sanitize syrup lines.	
		b. Blocked flow control.	b. Contact a service technician.	
11	Lack of syrup being supplied to machine.	a. Loss of CO ₂ to propel syrup.	a. Contact a service technician.	
		b. Clogged or kinked syrup lines.	b. Sanitize syrup lines regularly. If kinked, repair or replace.	

Section 9 Parts Replacement Schedule

PART DESCRIPTION	EVERY 4 MONTHS	EVERY 8 MONTHS	ANNUALLY
Scraper Blade		Х	
Drive Shaft Seal	X		
Drive Shaft O-Ring	X		
Freezer Door O-Ring	X		
Draw Valve O-Ring	X		
Door Spout O-Ring	X		
Front Bearing	X		
Prime Plug O-Ring	X		
Black Bristle Brush, 1" x 2"		Inspect & Replace if Necessary	Minimum
Double Ended Brush		Inspect & Replace if Necessary	Minimum
White Bristle Brush, 1-1/2" x 2"		Inspect & Replace if Necessary	Minimum
White Bristle Brush, 3" x 7"		Inspect & Replace if Necessary	Minimum

Parts List

DESCRIPTION	PART	QTY.	WARR.	REMARKS	PARTS
ARM AIDLER *356*	X64892	2	103		2 2
ACCUMULATOR-COPPER 2"DIA 13"	053377	2	000		
BEARING-FRONT-SLUSH-PRESSURE	039349	4	000		
BEARING-REAR SHELL-PLASTIC	032511	4	000		
+GUIDE-DRIP SEAL	028992	4	000	055437	
+NUT-BRASS BEARING	028991	4	000		
+WASHER-BEARING LOCK	012864	4	000		
BEARING-UNIT-REAR 1-3/8" SHAFT	054579	4	103		
BEATER-PLASTIC-FCB-PRESSURIZED	041182	7	103		
+BLADE-SCRAPER-FCB 16L	041103	8	000		
BELT375 PITCH 255100	062620	2	000	208-230V 60HZ 1PH	
BELT-POLY V-370J10	059589	_	000	208-230V 60HZ 1PH	
BELT-POLY V-560J10	055437	_	000	S/N K7097206 & UP REPLACES 025551 R	196
BLOCK-TERMINAL 2P L1,L2	039422	_	103	208-230V 60HZ 1PH	
BLOCK-TERMINAL 3P L1,L2,L3	039423	1	103	208-230V 60HZ 3PH	
BODY AFLOW CONTROL W/SOL.	X59615-27S	4	103		
BRUSH APACKAGE C300	X64275	1	000	S/N K6081531 & UP	
BUSHING-SNAP 3/8ID X 1/20D-BLK	091254	1	303	UP FRT PANEL	
CABLE-RIBBON-14C-22"L-SIP/SIP	040040-019	2	103	J9-UC TO LCD	
CABLE-RIBBON-20C-14"L-DIL/DILR	040040-056	2	103	J2-UC TO J10-IC RIGHT	
CABLE-RIBBON-20C-18"L-DIL/DILR	040040-042	7	103	J7-UC TO J8-IC LEFT	
CABLE-RIBBON-50C-10"L-DIL/DIL	040040-058	1	103	J10-UC TO J9-IC RIGHT	
CABLE-RIBBON-50C-20"L-DIL/DIL	040040-011	1	103	J10-UC TO J9-IC LEFT	
CARBONATOR-3/8 O-RING FTG'S	062242-27	1	103	S/N K5045194 & UP	188
CARBONATOR *345-346-349*	049455-27	1	103	S/N K5032818 & PRIOR USE X62530-SER KIT ACONV-CARB	
CARD-CHECKOUT SLUSHTECH-5 YR	039976-W5	_	000		
CLAMP-HOSE 23/32-STEPLESS EAR	053957	2	000		
CLAMP-HOSE 15/32-STEPLESS EAR	059755	1	000		
CLIP-RETAINER-LINE-SYRUP *355*	053197	25	000	SS LINES	
+O-RING-3/8 OD X .070 W	016137	16	000		
COMPRESSOR CS17K6E-PFV-238	052397-27E	2	512	208-230V 60HZ 1PH	

⁺ Available Separately

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	PART NUMBER	QTY.	WARR. CLASS	REMARKS F	PARTS UPDATE
+CAPACITOR-RUN 35UF/440V	048132	2	103		
+RELAY-START-COMPRESSOR	051957-27	2	103		
+CAPACITOR-START 189-227UF/250V	053106	2	103		
COMPRESSOR CS17K6E-PFV-238	052397-33	2	512	208-230V 60HZ 3PH	
CONDENSER-AC 16X29 3ROW 12FPI	059568	_	103		
CORE-SCHRADER VALVE-TEFLON	037047	4	103		
COUPLING ATORQUE-FCB-HEX	X39523	4	103		
COUPLING-TORQUE-LOAD-HEX	039397	4	103		
COUPLING-TORQUE-DRIVE	046866	4	103		
LABEL-IDENTIFICATION-RED	049285-RED	4	000		
SCREW-5/16-18X3/8 ALLEN SET	025376	8	000		
PIN-COUPLING-TORQUE	039453	12	103		
SCREW-SHOULDER 3/16DX1/2L-SS	039455	12	000		
SPRING-3/8 ODX3/16 IDX1L-RED	039734	12	103		
CONDENSER-AC 16X29 3ROW 12FPI	059568	1	103		
COVER-HOLE-FILTER *C300*	054673	2	NNN		
DECAL-CONTROL *355* LEFT	052898	2	000		
DECAL-CONTROL FCB-RIGHT	043636-R	2	000		
DECAL-DEC-TAYLOR DOMED	053761	1	000		
DECAL-INST-CLN-FCB-C302	055935	1	000		
DECAL-TROUBLESHOOT	038374	1	000		
DIAGRAM-WIRING *C302* SINGLPWR	059680-27S	1	000	208-230V 60HZ 1PH	
DIAGRAM-WIRING *C302* SINGLP	059680-33S	_	000	208-230V 60HZ 3 PH	
DISPLAY-LIGHTED-POP	059584-27	~	103	60 HZ 15.375 HIGH	
BALLAST-220V 60HZ .30A *356*	052841-1	2	103	2-12" BULBS	
BULB-FLUORESCENT-CIRCLIN	052841-2	2	103		
LENS-POP DISPLAY-LIGHTED	052841-4	_	103	1-SET	
DISPLAY-LIGHTED-POP	059584-27A	-	103	60 HZ 10.5 HIGH	
BALLAST-220V 50HZ .64A *C300*	054683-5	2	103		
BULB-FLUORESCENT-CIRCLIN *C300	054683-2	2	103	2-8" BULBS	
LENS-POP DISPLAY-LIGHTED*C302*	059584-4A	1	103		
DOOR-FREEZER-SLUSH-PRESSURE	039573	4	103		
+O-RING-5-1/4O.D. X .210W	017003	4	000	DOOR	

⁺ Available Separately

DESCRIPTION	PART NUMBER	QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
+CAP-SPOUT-DOOR-FCB-BLACK	046191-BLA	4	103		
+HANDLE-DRAW-FCB-BLACK	046192-BLA	4	103		
+NUT-SPOUT-DOOR-SLUSH-PRESSURE	039323	4	103		
+O-RING-1.129 ODX.989IDX.070W	039219	4	000		
+PIN-PIVOT-SPOUT-DOOR-SLUSH	039321	4	103		
+PLUG-PRIME-SLUSH-PRESSURE	039568	4	103	029751 O-RING	
+O-RING-9/32 OD X 1/16 WALL	029751	8	000	PRIME PLUG	
+SCREW-10-32X3/8PHL-TRUS HD-SS	053869	8	000		
+SLIDE-HANDLE-DOOR-FCB-BLACK	046193-BLA	8	103		
+SPOUT-DOOR-FCB-BLACK	046190-BLA	4	103		
+O-RING-1.129 ODX.989IDX.070W	039219	4	000	DOOR SPOUT	
+SPRING-COMP.480X.072X3.0-SS	039320	4	103		
+VALVE-DRAW-DOOR-SLUSH-PRESSURE	039324	4	103		
+O-RING-9/16 OD X .103W	016369	8	000	DRAW VALVE	
DRYER-FILTER 3/80DFX3/80DMHP	062158	2	000	S/N K5012992 REPLACES 049154	
FASTENER-DOOR LATCH	030787	2	000	POP UNIT SIDE	
FASTENER-DOOR STRIKE	030788	2	000	POP DISPLAY	
FILTER-AIR-15.88LX29.50LX.70W	052779-10	~	000		
FILTER-CORCOM 6EH1	040140-001	_	103		
FILTER-H20-5 MICRON-INLINE W/F	064422	_	000	S/N K6071462 & UP	
FILTER-WATER 1/4FFLINX1/4MFLOV	062507	1	000	S/N K5045194 TO K6071461	
FILTER-WATER 1/4FFLINX1/4MFLOV	053697	1	000	K5045193 & PRIOR	
FUSE-15 AMP-IN LINE-NON DELAY	045293	2	000		
GASKET-BASE PAN *C302*	059585	1	000		
GASKET-FRONT PANEL *C302*	059596	4	000		
GUIDE ADRIP PAN *C302*	X59707-SER	2	103		
HARNESS-WIRE-PWR/COMP-L	059651	1	103	208-230V 60HZ 1PH	
HARNESS-WIRE-C300 PWR/COMP	056334-27	_	103	208-230V 60HZ 1PH	
HARNESS-WIRE *C300* PWR/COMP	056334-33	~	103	208-230V 60HZ 3PH	
HARNESS-WIRE-PWR/COMP-L *C302*	059651-33	1	103	208-230V 60HZ 3PH	
HARNESS-WIRE-LO VOLT-L *C302	059619	1	103	208-230V 60HZ 1PH/3PH	
HARNESS-WIRE-LO VOLT-R *C302	059620	1	103	208-230V 60HZ 1PH/3PH	
HARNESS-WIRE-HI VOLT-L *C302	059621-27	_	103	208-230V 60HZ 1PH/3PH	

⁺ Available Separately

DESCRIPTION	PART NUMBER	QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
HARNESS-WIRE-HI VOLT-R *C302	059622-27	1	103	208-230V 60HZ 1PH/3PH	
HOLDER-FUSE-IN LINE-TYPE HLR	045606	2	103		
HOOD *C302*	059658	_	103		
KIT ATUNE UP *C300* W/CARB	X59121	4	000		
BEARING-FRONT-SLUSH-PRESSURE	039349	1	000		
O-RING-9/16 OD X .103W	016369	2	000		
O-RING-5-1/4O.D. X .210W	017003	1	000		
O-RING-7/8 OD X .139W	025307	_	000		
O-RING-9/32 OD X 1/16 WALL	029751	2	000		
O-RING-1.129 ODX.989IDX.070W	039219	2	000		
SEAL-DRIVE SHAFT	032560	_	000		
TOOL-O-RING REMOVAL-FREEZER	048260-WHT	1	000		
LABEL-AIR DISCHARGE	023848	2	000	SIDE PANELS	
LABEL-DOOR-MOVE PART	032749	_	000		
LABEL-SWITCH-CONTROL	053145	7	000	UP FRT PANEL	
LABEL-WARN-COVER	051433	4	000	OUTSIDE PANELS - RLY BOX COVER - SPLICE BX COVER	
_ABEL-WARN-NO DRAW	042279	4	000		
LABEL-WARN-RELIEVE PRESS	039462	4	000	MIX TANK	
LED APRODUCT NOT READY	059711	2	103		
LENS-YEL LED-SNAP IN 1/4" HOLE	051751	4	103		
LINE AACCESS-SUCTION-R*C302*	X59641	7	NNN		
FITTING-REDUCER-3/8MS X 1/4FS	009541	_	103		
COUPLING-3/8FS X 1/4FS	031791	l	103		
VALVE-ACCESS-1/4MFL X 3/80DSDR	053565	l	103		
LINE AACCESS-SUCTION-L*C302*	X59640	1	NNN		
FITTING-REDUCER-3/8MS X 1/4FS	009541	1	103		
COUPLING-3/8FS X 1/4FS	031791	1	103		
VALVE-ACCESS-1/4MFL X 3/80DSDR	053565	l	103		
LINE ACO2 *C302* CARBONATOR	X62509	1	103	S/N K5045200 & UP	
ADAPTOR-SWV 1/4FFLX1/4 BARB-SS	016715	1	103		
FITTING-3/8 MOR X 1/4 BARB-SS	049427	1	103		
HOSE-BEV250IDX.438OD-100'	R30317	1	000		

⁺ Available Separately

DESCRIPTION +	PART NUMBER	QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
LINE ACO2 MAN/SOL VLV	X59672	-	103	SOL VLV & CARB	
ADAPTOR-SWV 1/4FFLX1/4 BARB-SS	016715	4	103		
	R30317	1	000		
Z	X59674	1	103		
ADAPTOR-SWV 1/4FFLX1/4 BARB-SS	016715	1	103		
	R30317		000		
LINE ACO2 WATER	X59675	1	103	S/N K5032818 & PRIOR	
ADAPTOR-SWV 3/8FFL X1/4BARB-SS	056805	1	103		
CLAMP-HOSE 1/2-STEPLESS EAR	096290	1	000		
HOSE-BEVERAGE-1/4 ID X 7/16 OD	R30313	1	000		
LINE ADISCHARGE *C302* LEFT	X59644-27	-	NNN		
COUPLING-3/8FS X 1/4FS	031791	1	103		
ELBOW-1/2S-STREET-SHORT RADI	013809	1	103		
TEE-3/8S X 3/8S X 1/4S-COPPE	016441	2	103		
TEE-1/2S X 1/2S X 3/8S-COPPE	016483	2	103		
STRAINER-CONE MESH-1/4 ODF	062298	2	000	STRAINER ADDED 12/1/2004	
SWITCH-PRESSURE 440 PSI-SOLD	048230	1	103		
VALVE-ACCESS-1/4MFL X 3/80DS	053565	1	103		
VALVE-SOLENOID 1/8PORT-3/80D	051127-27	7	103		
LINE ADISCHARGE *C302*RIGHT	X59645-27	1	NNN		
COUPLING-3/8FS X 1/4FS	031791	1	103		
ELBOW-1/2S-STREET-SHORT RADI	013809	1	103		
ELBOW-3/8S-STREET-SHORT RADIUS	013017	1	103		
TEE-3/8S X 3/8S X 1/4S-COPPE	016441	7	103		
TEE-1/2S X 1/2S X 3/8S-COPPE	016483	7	103		
STRAINER-CONE MESH-1/4 ODF	062298	7	000	STRAINER ADDED 12/1/2004	
SWITCH-PRESSURE 440 PSI-SOLD	048230	1	103		
VALVE-ACCESS-1/4MFL X 3/80DS	053565	1	103		
VALVE-SOLENOID 1/8PORT-3/80D	051127-27	7	103		
LINE ADRAIN *C302* REAR	X59697	7	NNN		
FITTING-Y 1/2 BARB PLASTIC	057376	2	000	REPLACES 055744	
TEE-1/2ID X 1/2ID BARB PE	600001	2	103		
TUBE-VINYL 1/2ID X 11/16 OD	R30335		000		

⁺ Available Separately

DESCRIPTION	PART NUMBER	QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
LINE ALIQUID *C302*LEFT	X59632-27	-	NNN		
ELBOW-3/8S-STREET-SHORT RADIUS	013017	2	000		
FITTING-3/8FS X 3/8FS	062265	-	103		
VALVE-SOL-7/64 ORFX3/8SI-1/4	062087-27	2	103		
LINE ALIQUID *C302*RIGHT	X59633-27	-	NNN		
ELBOW-3/8S-STREET-SHORT RADIUS	013017	2	000		
FITTING-3/8FS X 3/8FS	062265	1	103		
VALVE-SOL-7/64 ORFX3/8SI-1/4SO	062087-27	2	103		
LINE AWATER*INLET*C302*	X64398	-	103		
CLAMP-HOSE 23/32-STEPLESS EA	053957	8	000		
FERRULE650 ID NP BRASS	029834	2	103		
FITTING-3/8MFLX3/8BARB BULKH	052806	-	103		
HOSE-BEVERAGE375 ID X.635	R30333	3	000		
REGULATOR-WATER-30 PSI FIXED	064388	-	103	REPLACES 051729 USED K6048478 & PRIOR	190
TEE-3/8 BARBX1/4MFLX3/8BARB-SS	038582	-	103		
LINE AWATER OUT *C302*	X64377	1	103	REPLACES X62508	
CLAMP-HOSE 23/32-STEPLESS EA	053957	ε	000		
ELBOW-BARB 3/8 X 3/8 STAINLESS	053894-1	1	103		
ELBOW-3/8 MOR X 3/8 BARB-SS	064390	1	103		
HOSE-BEVERAGE375 ID X.635	R30333	3	000		
LUBRICANT-TAYLOR HI PERF-4 OZ	048232	1	000		
MAN-OPER C302	059661-M	1	000		
MANIFOLD ACO2-2REG/4SOL*302*	X59597	-	103		
CAP 1/4FFL *355*SS	052857	1	NNN		
FITTING-1/4MFL X 1/4MPT	006295	4	103		
FITTING-3/8 FOR X 1/8 MPT-SS	054913	-	103		
MANIFOLD-CO2-2REG/4SOL*349*	051839-27	1	103		
TEE-1/4MFL X 1/4MFL X 1/8MP	006252	1	NNN		
TEE-1/4MFL X 1/8MPT X 1/4MFLSS	055651	-	103		
VALVE ACHECK-1/4FFLINX3/8FOR	X54906	4	103		
MANIFOLD-SODA COMPLT*C302*MOR	062506	1	103	S/N K5045194 & UP - FEMALE CONNECTIONS W/O'RING	
CLAMP-HOSE 1/2-STEPLESS EAR	053960	10	000		

⁺ Available Separately

DESCRIPTION	PART NUMBER	QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
	049427	1	103		
	R30313	.2	000		
	059438	-	103		
VALVE-CHECK 3/8 ORING X1/4BARB	059364	4	103		
	059437	1	103	K5032818 & PRIOR-FLARE CONNECTIONS	
	016715	1	103		
	014477-27B	2		S/N K7097206 & UP	196
	065681	2			
	065682	1			
	051284	4			
	054631-27	7	212	S/N K7097205 & PRIOR - UPDATE USE X65938-27 KIT A.MTR REPLACE 60 HZ	196
	033043	2	103	208-230V 60HZ 1PH/3 PH	
	057176	2	103		
	500302-27	2	103		
Ì	500311	2	103		
Ì	043666	16	103		
ı	013163	-	000		
1	043612	2	103	REAR BEARING	
1	059652	-	103		
	059576	-	103		
ĺ	059577	1	103		
l	059657	-	103		
	059721	1	103		
	059722	1	103		
	X47299-SER	1	212		
l	X56020-SER	2	212		
l	X40818 -SER	2	103		
	X51169-SER	2	103		
l	X40872-SER	2	212		
Ì	X40873-SER	2	103		
	X40875-SER	2	103		

⁺ Available Separately

DESCRIPTION	PART NUMBER	QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
CHIP-SOFTWARE UVC2 U11	X40876-SER	2	103		
CONTROL-SLUSH-INTF W/NTB ROHS	064254	2	212	4/1/11: REPLACES NON-ROHS BOARD X45622	
PROBE ATHERMISTOR *345-6*	X45708	2	103		
PROBE-THERMISTOR-BARREL-2% TOL	038061-BLK	4	103		
PULLEY-10J79PD-1/2BOR	065695	2	103	S/N K7097206 & UP REPLACES 042190	196
+BOLT-IDLER PULLEY *358*	046039	2	103		
PULLEY-IDLER 3.00PD X 1.49"	054826	2	103		
+ARM AIDLER *356*	X64892	2	103	ARM & SLEEVE	
+BOLT-IDLER PULLEY *358*	046039	2	103		
+BRACKET-IDLER ARM *358*	045912	2	103		
+NUT-3/8-16 MF LOCK	017329	2	000		
+SPRING-EXTENSION.500X.063X4.	046046	2	103		
PULLEY-GEARBELT-3.82PD627ID	029603	2	103		
PULLEY-10J-8.5PDX.627B-3.82PDG	059616	2	103		
PUMP-GAS OPERATED-WATER BOOST	064363	_	103	S/N K6051055 & UP	
+BRACKET-FLOJET WTR PUMP C302	064376	_	103		
PUMP-BIB-GAS OPERATED (OLD STYLE)	055526A	1	103	N/A USE X64375 KIT AFLOJET W BSTR PUMP C302	
REGULATOR-CO2 TANK-DOUBLE	051840	~	103		
RELAY-3PDT-10A-208/240V	023845-27	2	103		
RELAY-3 POLE-20A-208/240 50/60	012725-33	2	103	CONTACTOR	
SANITIZER KAY-5 CASE 125 PCKTS	041082	_	NNN		
SENSOR AEVC-SLUSH-15" *C302*	X59648M2	4	103		
SHAFT-BEATER-SLUSH-PRESSURE	039337	4	103		
+BUSHING-BEATER SHAFT/BOOT SEAL	042278	4	103		
+O-RING-7/8 OD X .139W	025307	4	000	BEATER SHAFT	
+SEAL-DRIVE SHAFT	032560	4	000		
SHELF-DRIP-TRAY *C302*	059653	-	103		
SHELL AINSULATED*C302*L-NP	X59578-SER	2	512	LEFT	
+STUD-NOSE CONE-5/16-18X5/16-18	020445	8	103		
SHELL AINSULATED *C302* R-NP	X59582-SER	2	512	RIGHT	
+STUD-NOSE CONE-5/16-18X5/16-18	020445	8	103		
SHIELD-SPLASH *C302*	059659	7	103		

⁺ Available Separately

+ DESCRIPTION	PART NUMBER	QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
SHROUD ACONDENSER *C302*	X29569	1	103		
SWITCH-MEMBRANE-5 POSITION-23"	053138	4	103		
SWITCH-PRESSURE-C02-AU CONTACT	059225	_	103	CUT IN 74 PSI CUT OUT 60 PSI	
SWITCH-PRESSURE-H20-AU CONTACT	059226	~	103	CUT IN 19 PSI CUT OUT 7 PSI	
SWITCH-ROCKER DPST OFF-ON	059627	2	103		
TANK AMIX-MOLD CAP-PRESS	X64689	4	103	S/N K7027674 & UP	
CAP-TANK-MIX-BOTTOM	062339	-	103		
O-RING-3.875 OD X .139W	055388	1	000		
SCREW-10X7/16 UNSL TD HWH	066234	က	000		
CLIP-RETAINER-TUBE-MIX *C300	062289	-	103	BOTTOM	
SCREW-10X7/16 UNSL TD HWH	066234	1	000		
CAP-TANK-MIX-TOP	062340	-	103		
O-RING-3.875 OD X .139W	055388	~	000		
SCREW-10X7/16 UNSL TD HWH	066234	2	000		
CLIP-RETAINER-LINE-SYRUP-LG	056541	3	000	TOP	
SCREW-6X3/8 PHIL. PAN HEAD	056619	3	000		
ORIFICE-FEEDTUBE *C300/C302*	063010	1	NNN		
O-RING487 X .110W	022327	1	000		
VALVE-RELIEF 30 PSI 1/8 MPT	039365	1	103		
ELBOW-3/8 MOR X 1/8 FNPT-SS	063957	-	103		
SWITCH-FLOAT *C300* TANK-MIX	055539	1	NNN		
O-RING563 OD X .070W-#013	043758	1	000		
TANK-MIX-SS-4"=MOLDED CAPS	063840	1	103		
TUBE-FEED-MIX	056807-5	1	103		
TANK AMIX *C300* CARBONATOR	X59119	4	103	S/N K7025860 & PRIOR	
CAP-TANK-MIX *C300*TOP	056617	4	103		
CAP-TANK-MIX *C300*BOTTOM	028950	4	103		
O-RING-3.875 OD X .139W	055388	8	000		
SCREW-10X1/2 HEXWHD-PLAST-SS	055389	24	000		
CLIP-RETAINER-LINE-SYRUP-LG	056541	8	000	TOP	
SCREW-6X3/8 HI-LO PHL PNHD-SS	056619	12	000		
SWITCH-FLOAT *C300* TANK-MIX	055539	4	103		
O-RING563 OD X .070W-#013	043758	4	000		

⁺ Available Separately

DESCRIPTION	PART NUMBER	QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
VALVE-RELIEF 30 PSI 1/8 MPT SS	039365	4	103		
TUBE-FEED-MIX	056807-5	4	103		
	056822	4	000	ВОТТОМ	
	056619	12	000		
TRAY-DRIP *C302*	059654	_	103		
TUBE-MIX 1/4 OD *C300/C302*	062410	4	103	SHL TO TANK	
+O-RING-3/4 OD X .070W	021265	8	000	MIX TUBES	
TUBE-VINYL 1/2ID X 11/16 OD	020944-36	2	000	SETUP SANITIZE R30335	
TUBE-VINYL 1/4ID X 1/16WALL	020941-18	4	000	SAMPLE VALVE R30312	
VALVE-ACCESS-1/4MFL X 3/80DSDR	053565	4	103		
VALVE-EXP-AUTO-1/4S X1/4 FPT	046365	4	103		
+BOOT-VALVE-EXPANSION	020300	4	000		
VALVE-SAMPLING-3 WAY-ORING FIT	056571	4	103		
VALVE-SOL-7/64 ORFX3/8SI-1/4SO	062087-27	2	103	LINE ALIQUID	
VALVE-SOL 1/8ORF 1/4INX3/8OUT	053511-27	2	103	LINE ADISCHARGE / LINE ADEFROST	
VALVE-SOLENOID 208/240 V-	028824-27	1	103		
WATER COOLED					
BLOWER-100 CFM	012796-27	-	103		
+GUARD-BLOWER	022505	-	103		
BRACKET AFITTING *C302*WC	X62110	1	103		
BRACKET-VALVE-WATER *C300	056359	7	103		
CLAMP-HOSE-ADJ 7/16 X 25/32	010031	16	NNN		
CONDENSER-WC-COAX	047540	2	103		
+BRACKET-CONDENSER *C300*W	056357	7	NNN		
+BRACKET-CONDENSER *C302*W	062107	1	NNN		
+BRACKET-FRAME *C302*WC	062108	7	NNN		
+ELBOW-1/2OD COPPER X 1/2	034095	4	103		
COUPLING-5/8FS X 1/2FS	015220	4	103		
ELBOW-3/8MP X 1/2 BARB-BRASS	018641	4	103		
ELBOW-3/8MPT X 1/2 BARB-45 DEG	044860	2	103		
HOOD *C302* W/C	059658-WC	-	103		

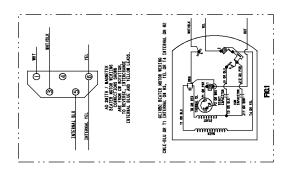
⁺ Available Separately

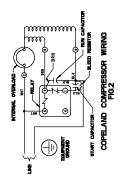
DESCRIPTION	PART NUMBER	QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
HOSE-RUBBER 1/2 ID X 7/8 OD	R50200	5'	000		
LABEL-INLET	037288	1	NNN		
LINE AWATER-OUTLET	X62459	~	103		
	X64398	~	103		
PANEL-SIDE-RIGHT *C300*	054671-WC	-	103		
PANEL-SIDE-LEFT *C300*	054676-WC	-	103		
PANEL-REAR *C302* W/C	059657-WC	-	103		
VALVE-WATER 3/8 REG/HEAD	046686	2	103		
50 HZ					
BELT-POLY V-590J10	062082	_	000	220-240V 50HZ 1PH	
BELT-POLY V-380J10	062098	_	000	220-240V 50HZ 1PH	
BELT-POLY V-590J10	062082	_	000	380-415V 50HZ 3N~	
BELT-POLY V-380J10	062098	_	000	380-415V 50HZ 3N~	
BLOCK-TERMINAL 3P L1,L2,L3	039423	1	103	200V 50HZ 3PH	
BLOCK-TERMINAL 2P L1,N	039421	~	103	220-240V 50HZ 1PH / 220-240V 50HZ 1PH	
BLOCK-TERMINAL 7P GREEN	024156	2	103	220-240V 50PH 1PH / 380-415V 50HZ 3N~	
BLOCK-TERMINAL 4P L1,L2,L3,N	039424	-	103	380-415V 50HZ 3N~	
COIL-SOLENOID-FLOW CONTROL	062013-40	2	103	200V 50HZ 3PH / 220-240V 50HZ 1PH / 380-415V 50HZ 3N	
COMPRESSOR CS17K6E-PFV-238	052397-33	2	512	200V 50HZ 3PH	
COMPRESSOR CS18K6E-PFJ-238	052397-40	2	512	220-240V 50HZ 1PH	
+CAPACITOR-START 145-175UF/25	052399	2	103	220-240V 50HZ 1PH	
+CAPACITOR-RUN 45UF/370V	052400	2	103	220-240V 50HZ 1PH	
+RELAY-START-COMPRESSOR	052401-27	2	103	220-240V 50HZ 1PH	
COMPRESSOR CS18K6E-TFD-238	052397-58	2	512	380-415V 50HZ 3N~	
DIAGRAM-WIRING *C302* SINGLPWR	059680-37S	1	000	200V 50HZ 3PH	
DIAGRAM-WIRING *C302*	059680-40S	1	000	220-240V 50HZ 1PH	
DIAGRAM-WIRING *C302*	059680-58S	1	000	380-415V 50HZ 3N~	
DVD-OPS TRAIN VIDEO*C300/C302*	064416-DVD	-	000	200V 50HZ 3PH / 220-240V 50HZ 1PH / 315-415V 50HZ 3N	
HARNESS-WIRE-HI VOLT-L *C302	059621-40	_	103	200V 50HZ 3PH	

⁺ Available Separately

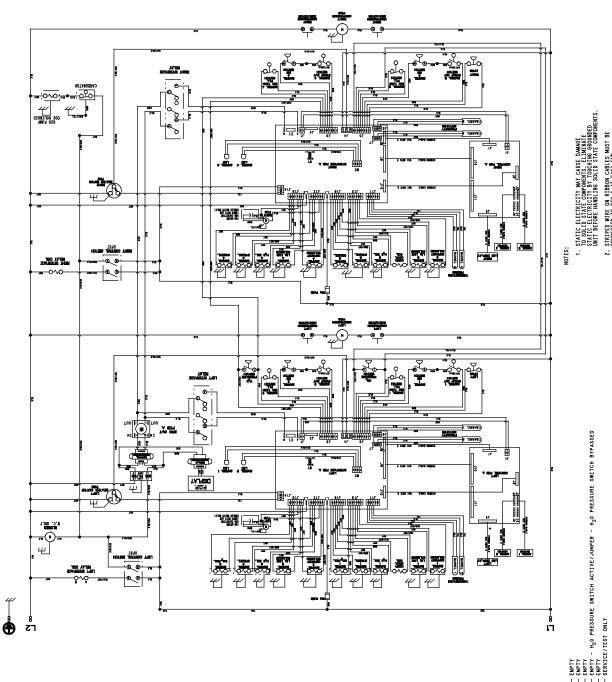
DESCRIPTION	PART NUMBER	QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
HARNESS-WIRE-HI VOLT-R *C302	059622-40	1	103	200V 50HZ 3PH / 220-240V 50HZ 1PH / 380-415V 50HZ 3N	
HARNESS-WIRE-C300 PWR/COMP	056334-40	1	103	220-240V 50HZ 1PH	
HARNESS-WIRE *C300* PWR/COMP	056334-58	1	103	380-415V 50HZ 3N~	
HARNESS-WIRE-PWR/COMP-L *C302*	059651-37	1	103	200V 50HZ 3PH / 220-240V 50HZ 1PH	
HARNESS-WIRE-PWR/COMP-L *C302*	059651-58	1	103	380-415V 50HZ 3N~	
MOTOR-1/4 HP W/OUT BASE S/N K7097206 &	014477-40B	1	212	200V 50 HZ 3PH / 240-240V 50HZ 1PH / 380-415V	
UP				50HZ 3N	
*SEE S/N NOTE				*014477-40B MOTOR S/N K7084784 & UP	
KIT AMOTOR REPLACE*C302*50HZ	X65938-58			MOUNTING FOR 014477-40B NO MOTOR	
MOTOR-1/3 HP 725 RPM	054631-40	2	212	S/N K7084783 & PRIOR NLA USE X65938-58 &	196
				U14477-4UB	
+CAPACITOR-START 108-130UF/250V	033043	2	103	USE X65938-58 KIT A. MTR REPLACE 50 HZ	
+CAPACITOR-RUN 10UF/370V	057176	2	103		
PULLEY-10J875PD-1/2BORE	025569	7	103	200V 50HZ 3PH / 220-240V 50HZ 1PH / 380-415V 50HZ 3N	

⁺ Available Separately









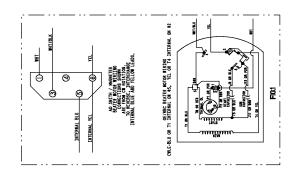
1. STATIC ELECTRICITY MAY CAUSE DAMAGE
TO SOLD STATE COMPONENTS. ELIVITATE
STATIC ELECTRICITY BY TOUCHING GROUNDED
UNIT BEFORE HANDLING SOLID STATE COMPONENTS.

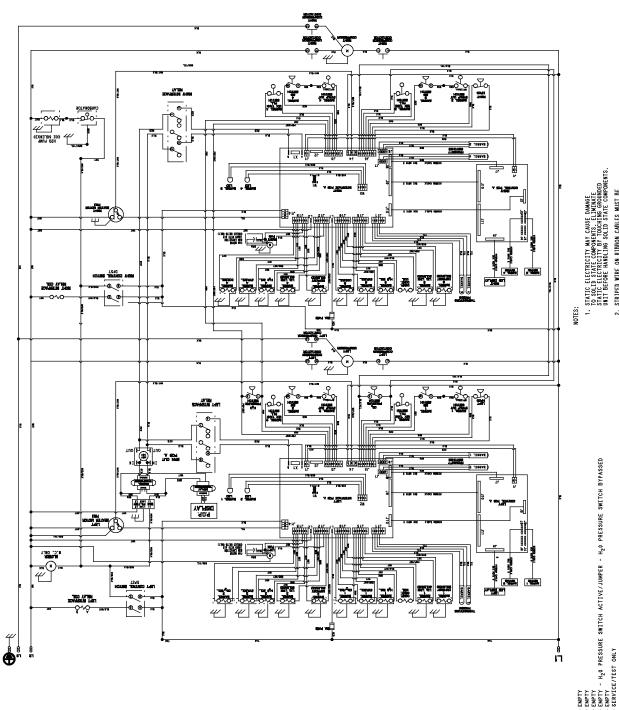
SONE DISPLAYS MAY HAVE BLK WIRE FOR L1, WHT WIRE FOR L2, AND GRN FOR GROUND. STRIPED WIRE ON RIBBON CABLES MUST BE CONNECTED TO PIN 1 AT EACH END.

- H20 PRESSURE SWITCH ACTIVE/JUMPER - H20 PRESSURE SWITCH BYPASSED

INTERFACE PCB A. WI JUMPER BLOCK DETAIL JUMPER BLOCK SHOWN ABOVE WOULD INDICATE A UNIT COMFIGURED AS A WOBEL COOP WITH AN H₂0 PRESSURE SWITCH.

Model C302 059680-27S Rev. 3/11





1. STATIC ELECTRICITY MAY CAUSE DAMAGE
TO SOLID STATE COMPONENTS. ELIVITATE
STATIC ELECTRICITY BY TOUCHING GROUNDED
UNIT BEFORE HANDLING SOLID STATE COMPONENTS.

GROUND FRAME SECURELY

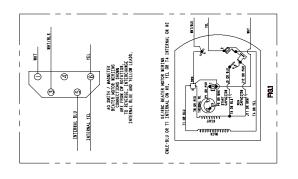
2. STRIPED WIRE ON RIBBON CABLES MUST BE CONNECTED TO PIN 1 AT EACH END.

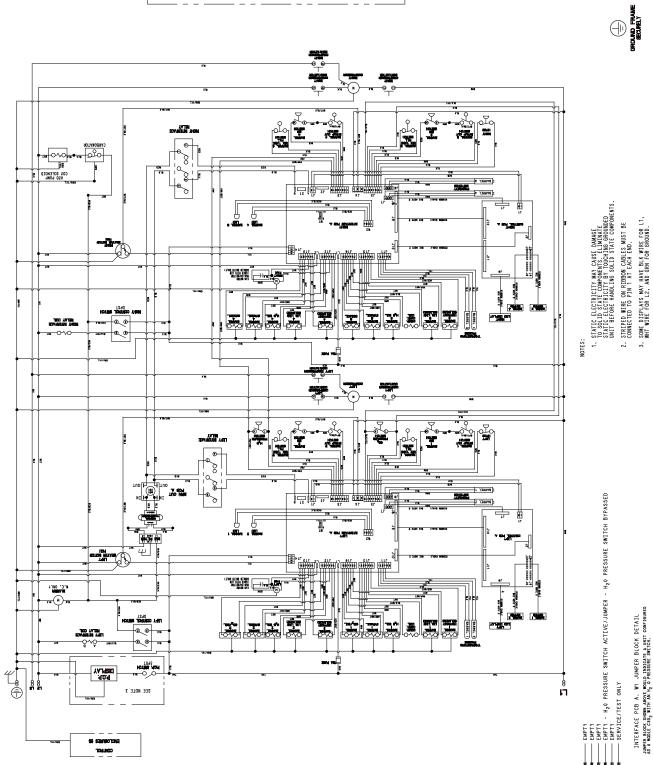
3. SOME DISPLAYS MAY HAVE BLK WIRE FOR L1, WHT WIRE FOR L2, AND GRN FOR GROUND.

INTERFACE PCB A. W1 JUMPER BLOCK DETAIL
JUMPER BLOCK SHOWN ABOVE WOULD INDICATE A UNIT CONFIGURED
AS A WODLE CSOS_WITH AN N. P. O PRESSURE SWITCH.

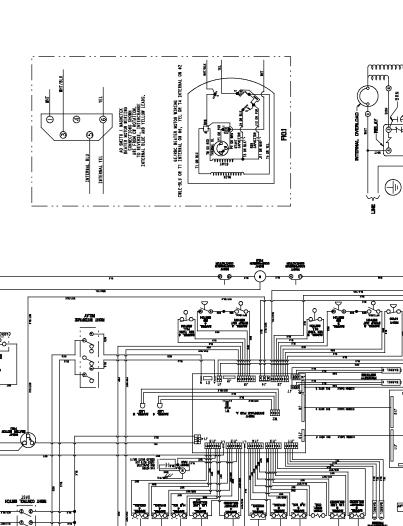
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Model C302 059680-33S Rev. 3/11





Model C302 059680-37S Rev. 3/11



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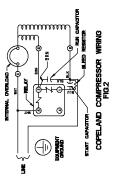
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1. STATIC ELECTRICITY MAY CAUSE DAMAGE
TO SOLID STATE COMPONENS. ELIVAINATE
STATIC ELECTRICITY BY TOUGHING GROUNDED
UNIT BEFORE HANDLING SOLID STATE COMPONENTS.

2. STRIPED WIRE ON RIBBON CABLES MUST BE CONNECTED TO PIN 1 AT EACH END.

3. SOME DISPLAYS MAY HAVE BLK WIRE FOR L1, WHT WIRE FOR L2, AND GRN FOR GROUND.

INTERFACE PCB A. WI JUNPER BLOCK DETAIL
JUNEER BLOCK SHOWN ABOVE WOULD INDICATE A BUIT CONFIGURED
AS A WODLE CSD2 WITH AM H2 O PRESSURE SWITCH.

- H20 PRESSURE SWITCH ACTIVE/JUMPER - H20 PRESSURE SWITCH BYPASSED

- EMPTY - EMPTY - EMPTY - H₂0 PRESSURI - EMPTY - H₂0 PRESSURI - SERVICE/TEST ONLY

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Model C302 059680-40S Rev. 3/11

